

DIRECTORATE OF EDUCATION

GNCT of Delhi, Delhi Government

SUPPORT MATERIAL (2021-2022)

Class : XII

HOME SCIENCE English Medium

Under the Guidance of

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MESSAGE

I would like to congratulate the members of Core Academic Unit and the subject experts of the Directorate of Education, who inspite of dire situation due to Corona Pandemic, have provided their valuable contributions and support in preparing the Support Material for classes IX to XII.

The Support Material of different subjects, like previous years, have been reviewed/ updated in accordance with the latest changes made by CBSE so that the students of classes IX to XII can update and equip themselves with these changes. I feel that the consistent use of the Support Material will definitely help the students and teachers to enrich their potential and capabilities.

Department of Education has taken initiative to impart education to all its students through online mode, despite the emergency of Corona Pandemic which has led the world to an unprecedented health crises. This initiative has not only helped the students to overcome their stress and anxiety but also assisted them to continue their education in absence of formal education. The support material will ensure an uninterrupted learning while supplementing the Online Classes.

(H. Rajesh Prasad)

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MESSAGE

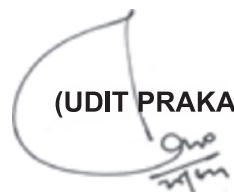
The main objective of the Directorate of Education is to provide quality education to all its students. Focusing on this objective, the Directorate is continuously in the endeavor to make available the best education material, for enriching and elevating the educational standard of its students. The expert faculty of various subjects undertook this responsibility and after deep discussions and persistent efforts, came up with Support Material to serve the purpose.

Every year the Support Material is revised/ updated to incorporate the latest changes made by CBSE in the syllabus of classes IX to XII. The contents of each lesson/chapter are explained in such a way that the students can easily comprehend the concept and get their doubts solved.

I am sure, that the continuous and conscientious use of this Support Material will lead to enhancement in the educational standard of the students, which would definitely be reflected in their performance.

I would also like to commend the entire team members for their contributions in the preparation of this incomparable material.

I wish all the students a bright future.

(UDIT PRAKASH RAI)


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Dated: 29.06.2021

MESSAGE

It gives me immense pleasure to present the revised edition of the Support Material. This material is the outcome of the tireless efforts of the subject experts, who have prepared it following profound study and extensive deliberations. It has been prepared keeping in mind the diverse educational level of the students and is in accordance with the most recent changes made by the Central Board of Secondary Education.

Each lesson/chapter, in the support material, has been explained in such a manner that students will not only be able to comprehend it on their own but also be able to find solution to their problems. At the end of each lesson / chapter, ample practice exercises have been given. The proper and consistent use of the support material will enable the students to attempt these exercises effectively and confidently. I am sure that students will take full advantage of this support material.

Before concluding my words, I would like to appreciate all the team members for their valuable contributions in preparing this unmatched material and also wish all the students a bright future.


(Rita Sharma)

DIRECTORATE OF EDUCATION

GNCT of Delhi, Delhi Government

SUPPORT MATERIAL

(2021-2022)

HOME SCIENCE

English Medium

Class : XII

NOT FOR SALE

PUBLISHED BY : DELHI BUREAU OF TEXTBOOKS

भारत का संविधान
भाग 4क
नागरिकों के मूल कर्तव्य

अनुच्छेद 51क

मूल कर्तव्य – भारत के प्रत्येक नागरिक का यह कर्तव्य होगा कि वह –

1. संविधान का पालन करे और उसके आदर्शों, संस्थाओं, राष्ट्र ध्वज और राष्ट्रगान का आदर करें।
2. स्वतंत्रता के लिए हमारे राष्ट्रीय आंदोलन को प्रेरित करने वाले उच्च आदर्शों को हृदय में संजोए रखे और उनका पालन करे।
3. भारत की प्रभुता, एकता और अखंडता की रक्षा करे और उसे अक्षुण्ण रखे।
4. देश की रक्षा करे।
5. भारत के सभी लोगों में समरसता और समान भ्रातृत्व की भावना का निर्माण करे।
6. हमारी सामाजिक संस्कृति की गौरवशाली परंपरा का महत्त्व समझे और उसका निर्माण करे।
7. प्राकृतिक पर्यावरण की रक्षा और उसका संवर्धन करे।
8. वैज्ञानिक दृष्टिकोण और ज्ञानार्जन की भावना का विकास करे।
9. सार्वजनिक संपत्ति को सुरक्षित रखे।
10. व्यक्तिगत एवं सामूहिक गतिविधियों के सभी क्षेत्रों में उत्कर्ष की ओर बढ़ने का सतत प्रयास करे।
11. माता-पिता या संरक्षक द्वारा 6 से 14 वर्ष के बच्चों हेतु प्राथमिक शिक्षा प्रदान करना (86वां संशोधन)।

CONSTITUTION OF INDIA

Part IV A (Article 51 A)

Fundamental Duties

Fundamental Duties : It shall be the duty of every citizen of India —

1. to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
2. to cherish and follow the noble ideals which inspired our national struggle for freedom;
3. to uphold and protect the sovereignty, unity and integrity of India;
4. to defend the country and render national service when called upon to do so;
5. to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
6. to value and preserve the rich heritage of our composite culture;
7. to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures.
8. to develop the scientific temper, humanism and the spirit of inquiry and reform;
9. to safeguard public property and to adjure violence;
10. to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.
11. who is a parent or guardian to provide opportunities for education to his child or, as the case may be, ward between the age of six and fourteen years.

भारत का संविधान

उद्देशिका

हम, भारत के लोग, भारत को एक (सम्पूर्ण प्रभुत्व—सम्पन्न समाजवादी पंथनिरपेक्ष लोकतंत्रात्मक गणराज्य) बनाने के लिए, तथा उसके समस्त नागरिकों को :

सामाजिक, आर्थिक और राजनैतिक न्याय,

विचार, अभिव्यक्ति, विश्वास, धर्म

और उपासना की स्वतंत्रता,

प्रतिष्ठा और अवसर की समता

प्राप्त करने के लिए,

तथा उन सब में,

व्यक्ति की गरिमा और (राष्ट्र की एकता

और अखंडता) सुनिश्चित करने वाली बंधुता

बढ़ाने के लिए

हम दृढ़संकल्प होकर इस संविधान को आत्मार्पित करते हैं।

THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a **(SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC)** and to secure to all its citizens :

JUSTICE, social, economic and political,

LIBERTY of thought, expression, belief, faith and worship,

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the **(unity an integrity of the Nation)**;

WE DO HEREBY GIVE TO OURSELVES THIS CONSTITUTION.

Session 2021-2022

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Class XII

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CONTENTS

Home Science (064) Support Material- Session (2021-22)

S.No.	Unit	Chapter/Topic	P. No.
i.		CBSE Syllabus 2021-22	<i>i</i>
ii.		List of Projects and Practicals- Term Wise	<i>xii</i>
iii.		Scheme of Practicals- Term Wise	<i>xiv</i>
1.	Unit I Work, Livelihood and Career	Work, Livelihood and Career	1
2.	Unit II Nutrition, Food Science And Technology	Clinical Nutrition and Dietetics	28
3.		Public Nutrition and Health	61
4.		Catering and Food Service Management	83
5.		Food Processing and Technology	108
6.		Food Quality and Food Safety	126
7.	Unit III Human Development And Family Studies	Early Childhood Care and Education	145
8.		Special Education and Support Services	162
9.		Management of Support Services, Institutions and Programmes for Children, Youth and Elderly	179
10.	Unit IV Fabric And Apparel	Design for Fabric and Apparel	221
11.		Fashion Design and Merchandising	249
12.		Production and Quality Control in the Garment Industry	269
13.		Care and Maintenance of Fabrics in Institution	285
14.	Unit V Resource Management	Human Resource Management	308
15.		Hospitality Management	328
16.		Consumer Education and Protection	352
17.	Unit VI Communication And Extension	Development Communication and Journalism	378
18.		Media Management, Design and Production	408
		CBSE Sample Paper with Marking Scheme (2020-2021)	431
		CBSE Sample Paper with Marking Scheme Term-1 (2021-2022)	454
S.No.	Chapters not included in C.B.S.E. Syllabus 2021-22		
4.	Catering and Food Service Management		
8.	Special Education and Support Services		
12.	Production and Quality Control in the Garment Industry		
14.	Human Resource Management		
18.	Media Management, Design and Production		

SYLLABUS
HOME SCIENCE (CODE No.064)
(Class-XII)
(2021-2022)

PREFACE

The course in Home Science encompasses five areas namely, Foods and Nutrition, Human Development and Family Studies, Fabric and Apparel, Resource Management and Communication and Extension. All these domains have their specific content in focus that contributes to the study of the individual and the family in Indian social cultural context.

The purpose of Home Science is the creation of an environment and outlook to enable learner to live a richer and more purposeful life, become future ready and develop 21st century life skills for work, livelihood and careers. All the domains within the home science discipline provide ample scope for professional avenues of higher education and career opportunities. They range from professions catering to various health and service institutions/agencies, educational organizations, industry and business houses of textiles, garments, food industry, teaching learning materials, ergonomically appropriate equipment and work situations. The subject integrates the application of various sciences and humanities to improve Human Environment, Family Nutrition, Management of Resources and Child Development.

In Class XI, the "Self and family" and the "Home" were focal points for understanding the dynamics for individual lives and social interactions.

In class XII, the emphasis is on "Work and careers" through the life span.

LEARNING OBJECTIVES

The Home Science curriculum at senior secondary level has been framed to enable the learners to:

1. develop an understanding of the self and one's role and responsibilities as a productive individual and as a member of family, community and society.

2. integrate learning across diverse domains and undertake a critical analysis of issues and concerns specific to family, community and society.
3. appreciate the discipline of Home Science for professional careers.
4. acquaint learners with the basic knowledge specific to five domains namely, Foods and nutrition, Human Development and Family studies, Fabric and Apparel, Resource Management and Communication and Extension.
5. develop functional skills in the five domains for career and employment.
6. equip learners for enrichment and higher studies.

LEARNING OUTCOMES

After undertaking the course students will be able to:

1. function as a productive and responsible individual in relation to self, family, community and society.
2. apply the basics of human development with specific reference to self, family and community.
3. utilize the skills of judicious management of various resources.
4. be sensitized to fabric and apparel, their selection and care.
5. inculcate healthy food habits and lifestyle to enable prevention and management of diseases.
6. become alert and aware consumer.
7. appreciate the potential of entrepreneurship and other varied professional opportunities to make informed career choices.

HOME SCIENCE (2021-22)

CLASS XII

INTRODUCTION

In class XII, the emphasis is on "Work and careers" through the life span. Within the curriculum the significance and scope of each domain (Foods and Nutrition, Human Development and Family Studies, Fabric and Apparel, Resource Management and Communication and Extension) and the multiple thrust areas emerging within them have been emphasized. The units spell out the basic concepts, requisite knowledge and skills in each thrust area and delineate the career avenues and the preparation required for them in order to make informed career choices.

TERM I

Course Structure: Theory and practical

Theory: 35 marks

Unit No	Units	Marks	No. of Periods
1	Work, Livelihood and Career	05	10
2	Nutrition, Food Science and Technology	20	45
3	Human Development and Family Studies	10	35
	Theory	35	90

TERM II

Course Structure: Theory and practical

Theory: 35 marks

Unit No	Units	Marks	No. of Periods
4	Fabric and Apparel	16	40
5	Resource Management	12	35
6	Communication and Extension	07	15
	Theory	35	90

CLASS XII HOME SCIENCE

TERM I

UNIT-I: WORK, LIVELIHOOD AND CAREER

Ch. Work, livelihood and Career

UNIT II: NUTRITION, FOOD SCIENCE AND TECHNOLOGY

Ch. Clinical Nutrition and Dietetics

Ch. Public Nutrition and Health

Ch. Food Processing and Technology

Ch. Food Quality and Food Safety

UNIT II: HUMAN DEVELOPMENT AND FAMILY STUDIES

Ch. Early Childhood Care and Education

Ch. Management of Support Services, Institutions and Programmes
for Children, Youth and Elderly

TERM II

UNIT IV: FABRIC AND APPAREL

Ch. Design for Fabric and Apparel

Ch. Fashion Design and Merchandising

Ch. Care and Maintenance of Fabrics in Institutions

UNIT V: RESOURCE MANAGEMENT

Ch. Hospitality Management

Ch. Consumer Education and Protection

UNIT VI: COMMUNICATION AND EXTENSION

Ch. Development Communication and Journalism

Prescribed textbook: Human Ecology and Family Sciences
(For Class XII): Part I and Part II

CLASS XII HOME SCIENCE

TERM I

REFERENCE POINTS

UNIT-I WORK, LIVELIHOOD AND CAREER

Chapter: Work, Livelihood and Career

- Introduction
 - Work and meaningful work
 - Work, careers and livelihood
- Traditional occupation in India
 - Agriculture
 - Handicrafts
 - Indian cuisine
 - Visual arts
 - Work, Age and Gender
 - Gender issues in relation to work
 - Issues and concerns related to women and work
 - KGBV
 - Beti bachao ,Beti Padhao Yojana
- Attitudes and approaches to work and life skills for livelihood
 - Attitudes and approaches to work
 - Life skills for livelihood
 - Essential soft skills at workplace
- Ergonomics
 - Definition and need for ergonomics
 - Benefits of Ergonomics
- Entrepreneurship
 - Definition and characteristics

UNIT-II NUTRITION, FOOD SCIENCE AND TECHNOLOGY

Chapter: Clinical Nutrition and Dietetics

- Introduction
 - Nutrition

- Clinical Nutrition
- Significance
- Basic concepts
 - Diet therapy
- Types of diets: Regular Diet and Modified diets
- Changes in consistency
- Feeding routes
- Prevention of chronic diseases
- Preparing for career
- Scope

Chapter: Public Nutrition and Health

- Introduction
- Significance
- Basic concept
 - Public health nutrition
 - Nutritional Problems of India
 - Protein energy malnutrition
 - Micronutrient deficiencies
 - ✓ Iron deficiency Anaemia
 - ✓ Vitamin A deficiency
 - ✓ Iodine deficiency disorders
- Strategies/Intervention to tackle Nutritional problems
 - Diet or food based strategies
 - Nutrient based strategies
- Nutrition programmes operating in India
 - ICDS
 - Nutrient Deficiency Control Programmes
 - Food Supplementation Programmes
 - Food Security Programme
- Health Care
- Scope

Chapter: Food Processing and Technology

- Introduction
- Significance
- Basic Concepts
 - Food Science
 - Food Processing
 - Food Technology
 - Food Manufacturing
- Development of food processing and technology
- Importance of Food processing and Preservation
- Classification of food on the basis of extent and type of processing
- Preparing for a career
- Scope

Chapter: Food Quality and Food Safety

- Introduction
- Significance
- Basic Concepts
 - Food safety (Toxicity & Hazard)
 - Hazards (Physical, chemical and biological)
 - Food infection
 - Food poisoning
 - Food quality
- Food standards regulation in India-FSSA (2006) (Fruit and Vegetable Product Order, Meat Product Order and Vegetable Product Order are not included)
- International Organization and agreements in the area of Food Standards, Quality, Research and Trade
 - Codex Alimentarius Commission
 - International Organization for Standardisation
 - World Trade Organization

- Food Safety Management Systems
 - Good manufacturing practices (GMP)
 - Good handling practices (GHP)
 - Hazard Analysis Critical Control Points (HACCP)
- Scope

UNIT III HUMAN DEVELOPMENT AND FAMILY STUDIES

Chapter: Early Childhood Care and Education

- Significance
- Basic Concepts
- Preparing for a career
- Scope

Chapter: Management of support services, institutions and programmes for children, youth and elderly

- Significance
- Basic Concepts
- Why are children vulnerable ?
- Institutions, programmes and initiatives for children
 - ICDS
 - SOS Children's Village
 - Children's Homes run by the Government
 - Adoption
- Why are Youth vulnerable?
- Youth programmes in India
- Why are the elderly vulnerable?
- Some programmes for the elderly
- Preparing for a career
- Scope

TERM II

UNIT IV FABRIC AND APPAREL

Chapter: Design for Fabric and Apparel

- Introduction
- Basic concepts (Design: Structural & Applied)
- Elements of design
 - Colour
 - Texture
 - Line
 - Shapes or form
- Principles of Design
 - Proportion
 - Balance
 - Emphasis
 - Rhythm
 - Harmony
- Preparing for career
- Scope

Chapter: Fashion Design and Merchandising

- Introduction
- Significance
- Basic Concepts
 - Fashion terminology- Fashion, fads, style, classic
- Fashion Development
 - France-The centre of fashion
 - Fashion Evolution
- Fashion Merchandising
- Fashion Retail Organization
- Preparing For a career
- Scope

Chapter: Care and maintenance of fabrics in Institution

- Introduction
- Basic concepts
 - Washing equipment
 - Drying equipment
 - Ironing/pressing equipment
- Institutions
- Preparing for a career
- Scope

UNIT-V RESOURCE MANAGEMENT

Chapter: Hospitality Management

- Introduction
- Significance
- Basic concepts
- Departments involved in hospitality management of an organization
- Scope

Chapter: Consumer Education and Protection

- Introduction
- Significance of consumer education and protection
- Basic concepts
 - Consumer product
 - Consumer behaviour
 - Consumer forum
 - Consumer footfalls
 - Consumer problems
 - Consumer rights
 - Standardized marks (ISI, Wool Mark, Hall Mark, Silk Mark)
- Protection Councils
- Consumer Responsibilities
- Scope

UNIT-VI COMMUNICATION AND EXTENSION

Chapter: Development Communication and Journalism

- Introduction
- Significance
- Basic concepts
 - Development
 - Development Journalism
 - Development Communication
- Methods of communication
 - Campaign
 - Radio and Television
 - Print media
 - Information and communication technologies
- Knowledge and skills required for a career in this field
- Scope and career avenues in Development Communication

PRACTICALS FOR CLASS-XII

TERM I

UNIT-II NUTRITION, FOOD SCIENCE AND TECHNOLOGY

1. Modification of normal diet to soft diet for elderly person.
2. Development and preparation of supplementary foods for nutrition programme.
3. Planning a menu for a school canteen or mid-day meal in school for a week.
4. Design, prepare and evaluate a processed food product.
5. Qualitative test for food adulteration in: pure ghee, tea leaves, whole black pepper, turmeric powder, milk, asafoetida.

UNIT III HUMAN DEVELOPMENT AND FAMILY STUDIES

6. Preparation and use of any one teaching aid to communicate socially relevant messages for children/ adolescents /adults in the community.

OR

Preparation of any one toy for children (age appropriate) using locally available and indigenous material

TERM II

UNIT IV FABRIC AND APPAREL

1. Preparation of any one article using applied textile design techniques; tie and dye/batik/block printing.
2. Remove different types of stains from white cotton cloth -Ball pen, curry, grease, ink, lipstick, tea and coffee.

UNIT-V RESOURCE MANAGEMENT

3. Evaluate any one advertisement for any job position.
4. Develop a leaflet/pamphlet for Consumer Education and Protection on any one of the following-
 - a. Consumer Protection Act (CPA)

- b. Consumer responsibilities
- c. Consumer organization
- d. Consumer problems

PROJECT

Any one of the following project may be undertaken and evaluated-

1. Study of an integrated community based, nutrition/health programme being implemented in own area, with reference to-
 - a. Programme objectives
 - b. Focal Group/Beneficiaries
 - c. Modalities of implementation
2. Visit to the neighbouring areas and interview two adolescents and two adults regarding their perception of persons with special needs.
3. Profile any two person (child/adult) with special needs to find out their diet, clothing, activities, physical and psychological needs.
4. Planning any five messages for nutrition, health and life skills using different modes of communication for different focal groups.
5. Market survey any five processed foods with their packaging and label information.

SCHEME FOR PRACTICAL EXAMINATION

CLASS XII HOME SCIENCE

Term I

1	Project	5 Marks
2	Modification of any one family meal for elderly person. Preparing any one of the modified dish. OR Development and preparation of any one supplementary food for pre-schooler (2-6 years) nutrition programme. OR Planning a menu for school canteen and preparing any one nutritious dish.	5 Marks
3	Identify adulterant using chemical test in any one of the following- pure ghee, tea leaves, whole black pepper, turmeric powder, milk, asafoetida.	2 Marks
4	Viva	3 Marks
	TOTAL	15 Marks

Term II

1	Prepare a sample using applied textile design techniques-tie and dye/batik/block printing.	4 Marks
2	Remove any one of the stain from white cotton cloth -Ball pen, curry, grease, ink, lipstick, tea, coffee.	2 Marks
3	Develop a leaflet/pamphlet for Consumer Education and Protection on any one of the following- a. Consumer Protection Act (CPA) b. Consumer responsibilities c. Consumer organization d. Consumer problems	4 Marks
4	File	5 Marks
	TOTAL	15 MARKS

1. WORK, LIVELIHOOD AND CAREER

‘POINTS TO REMEMBER’

1. Work refers to all those essential activities that are done for a purpose or out of necessity. All human beings work and create their identity in the society.

2. Concept of Work

Work may be viewed as

- i. a job and a means of making a living,
- ii. a means of developing self-esteem and dignity,
- iii. a source of pleasure and mental satisfaction,
- iv. a symbol of status, power and control,
- v. a means for self-development and self-actualization,
- vi. a part of spiritual practice and religion and a task or duty,
- vii. a source of financial benefit,
- viii. provides opportunity for expressing one's unique talents and creativity,

3. Factors affecting work

- i. Education
- ii. Health
- iii. Age and gender
- iv. Accessibility of opportunity
- v. Globalization
- vi. Geographic conditions
- vii. Financial benefits
- viii. Family background

4. Meaningful work

- i. Work which is useful to society or to others, is done responsibly and is enjoyable to worker is called the meaningful work.
- ii. It contributes to personal growth, instills confidence and self-worth and may eventually lead to actualization of full potential

- iii. It provides opportunities to contribute to the improvement of one's own life conditions and that of society.

5. Work livelihood and career

Work

Work is a set of activities with an intended set of outcomes which includes employment and entrepreneurship, consulting, volunteerism, contract, social work for community welfare and other professional.

Career

- i. Career denotes the means and occupation by which an individual fulfils his basic needs.

INDIAN TRADITIONAL HANDICRAFTS AND VISUAL ARTICLES



1.1 Shola Craft
(Odisha)



1.2 Channpatan Dolls
(Karnatka)



1.3 Carved Statues
(Rajasthan)



1.4 Warli Paintings
(Maharashtra)



1.5 Puppetry Art
(Rajasthan)



- ii. To achieve success in career, a person constantly learns new skills, obtains new information, and is always ready to prove himself in his chosen field.
- iii. Career is a life management concept in which development continues throughout life.

Livelihood

- i. Livelihood refers to job, occupation and other means of work through which one earns money.
- ii. It meets the basic needs of a person and his family.

6. Difference between career and livelihood

Career	=	Livelihood (Job)	<ul style="list-style-type: none"> i. Desire to prove yourself in your field, ii. Enjoyment in job, iii. Efforts to improve life, iv. Always enthusiastic to learn new skills and gain new information.
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7. Questions to ask oneself before selecting a career

- What are my talents, traits and interests?
- Is the work stimulating and challenging for me?
- Does the work make me feel that I contribute to the society?
- Are the ethos and environment of workplace suitable for me?
- Will the work give a sense of being useful?

8. Perspectives of work done for earning money

- Work as a job and livelihood: Job satisfaction is gained by the money earned.
- Work as a career: Achievement of position and advancement in job satisfies a person.
- Work done for one's satisfaction: Completion of work itself satisfies a person.

9. Traditional occupations of India

- i. Agriculture
 - Almost 70% of Indian population live in rural areas and is dependent on farming for livelihood.

- In most parts of the country, some farmers produce 'cash crops' for sale in urban markets.
- Cash crops such as tea, coffee, cardamom and rubber are of great importance as they bring in foreign exchange.
- India is the largest producer of cashew nut, coconut, milk ginger, turmeric and black pepper in the world.

ii. Fishing

Fishing has been another important traditional occupation of India because of the country's very long coastline.

iii. Handicrafts

Handicrafts is also one of the most important traditional occupation of India. Many Indian arts and crafts are very popular in the international market. Some examples are:

- Shola craft of Odisha (fig. 1.1)
- Channpatan dolls of Karnataka (fig. 1.2)
- Warli painting of Maharashtra (fig. 1.4)
- Puppetry craft of Rajasthan (fig. 1.5)
- Coconut craft of Kerala (fig. 1.6)
- Bamboo craft of Assam (fig. 1.7)

iv. Weaving and embroidery



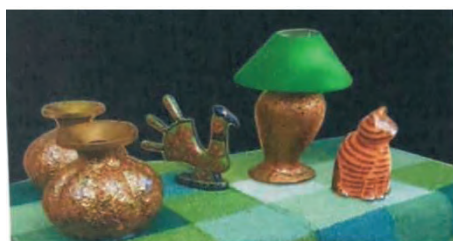
1.6 Coconut Craft
(Kerala)



1.7 Bamboo Craft
(Assam)



1.8 Kashidakari(Embroidery Arts)
(Kashmir)



1.9 Paper Mache



1.10 Shell Art

1.11 Carvings in Terracotta and Colourfull
Painted Walls and Roofs of Temples

- India is famous for different types of weaving. Weaving is an important cottage industry of India.
 - Each state has its own typical fabrics, embroidery stitches and costumes which are suitable for the region specific climate and life Style.
- v. Indian cuisine
- Indian Cuisine has emerged as a source of livelihood for innumerable persons, ranging from street food vendors to speciality restaurants and theme pavilions in 5 star hotels.
 - Many traditional foods and spice mixes and masalas are in demand in other countries.
- vi. Visual art
- In India, artists and artisans were supported by large Hindu temples and the rulers of various States.
 - In different places of worship a great variety of regional styles of architecture can be seen such as images skillfully carved in stone or cast in bronze or silver or in Terracotta or wood or colour fully painted. (1.11)
- vii. Other traditional occupations
- Garland/ornaments making
 - Working as a priest
 - Salt making
 - Mining
 - Brick and tile making
 - Hunting and trapping birds and animals

10. Reasons for downfall of traditional occupations

- i. Illiteracy
- ii. Economic backwardness
- iii. Inadequate or inefficient finance and marketing services
- iv. Depletion of forest based resources
- v. Slow progress in implementing Land Reforms
- vi. Environmental degradation

11. Need for revival/improvement of the traditional occupations

- i. To sustain our indigenous knowledge and skills
- ii. For foreign currency and income generation

- iii. To enhance employment potential of the rural folk
- iv. To conserve the variety in our traditional cultural heritage.

12. Ways for improvement in these occupations

- i. Establishment of training facilities
- ii. Design innovations
- iii. Use of Eco friendly raw materials
- iv. Preservation and refinement strategies
- v. New packaging
- vi. Protection of intellectual property right

13. Work, Age and Gender

- i. The perspective of individual's towards age and gender affect the personal and professional lives of the members of any workforce.
- ii. The lives of the workers is also affected from the perspective of people, society and the country towards age and gender.
- iii. The health and development of children and women is at stake when they are forced into labour which is not suitable for their age.

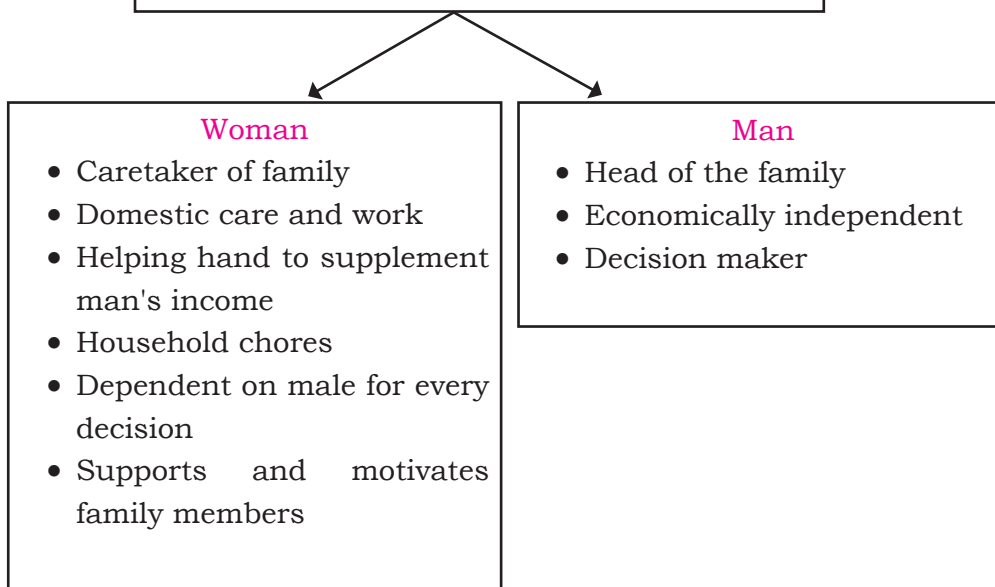
14. Gender issues in relation to work

- i. Human beings are differentiated into two sexes that is men and women based on biological and genetic factors. Lately, Indian Supreme Court has recognised transgender people as a third gender.
- ii. Sex refers to the biological categorisation based on genetics and reproductive organs and gender is based on social identity.
- iii. In every society the social and cultural practices determine how various genders are expected to behave and the type of work they do.
- iv. The gender role expected by the society become stereotyped and thus becomes the role identity of male and females.
- v. Despite the active participation in earning and contributing to family resources, the women are denied to take important decisions in family.
- vi. The need of an hour is to educate and empower women and give them their rightful voice and place in society.

- vii. The domestic work done by women needs to be valued as an economic contribution and productive activity.
- viii. With passage of time the conventional roles and behaviours are changing. Women have started participating in each sector of the economy. Many of them occupying senior positions. This has placed a double burden on women. Besides their job they are also expected to perform most or all of their household chores and be the primary caregivers.

15

Expected Roles Man/Woman in Society



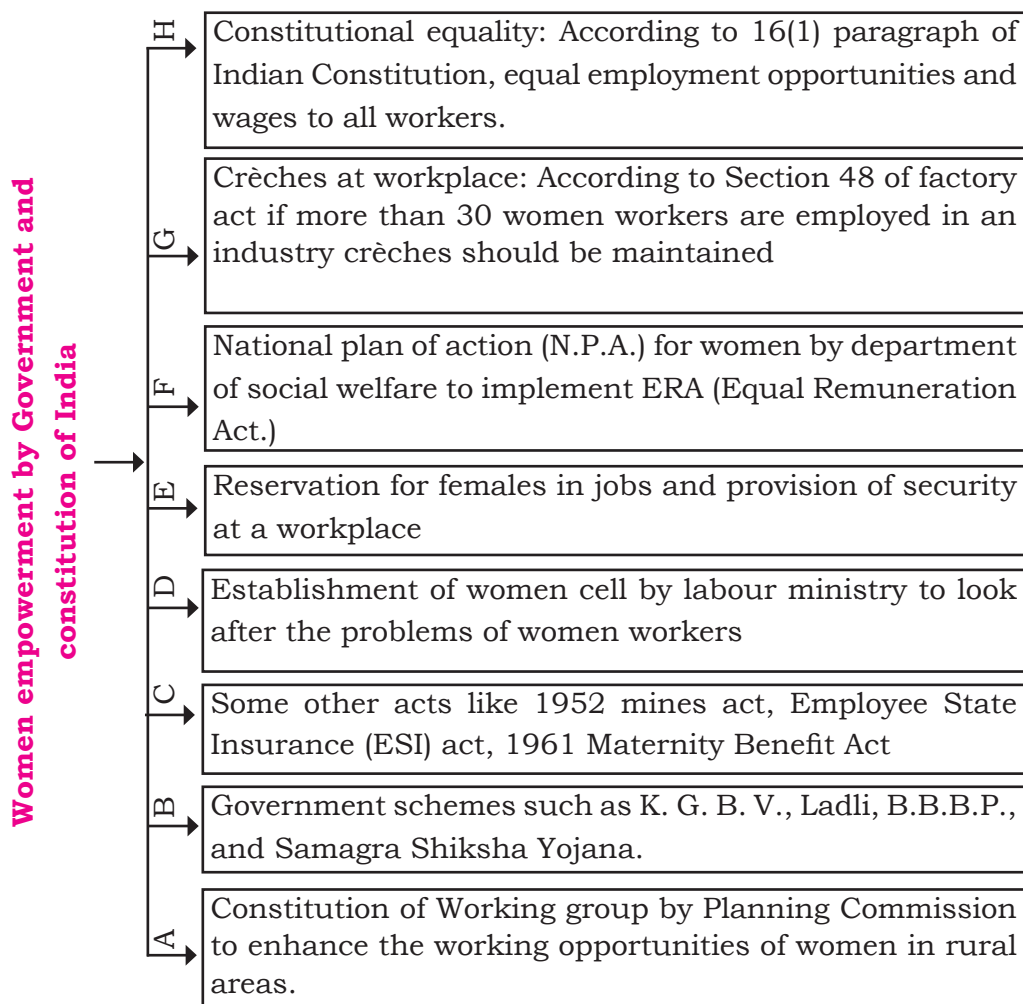
16. Issues Related to Women and work

- i. Less opportunities of participation by women in the labour market
- ii. Women's income considered supplementary and secondary
- iii. Gender discrimination with respect to prestigious positions
- iv. Stress and adverse effects on health
- v. Security and safety at workplace
- vi. Maternity benefits and social support for child care

17 A. Women empowerment: By society and family

- Education
- Involvement in family decisions
- Increase opportunities in high jobs
- Value domestic work as economic contribution and treating housewives as a part of human resource
- Burden of family and household chores to be shared by all the members

17 B. Women empowerment: By Government and constitution of India:



18. Examples of women empowerment

- Kiran Mazumdar Shaw (a biotechnologist) the chairperson and managing director of "Biocon India Limited" is an eminent women entrepreneur. She started her professional career as a Trainee brewer in Carlton and United beverages' and in 1978 formed her own company 'Biocon India Limited'. She received many prestigious awards and in 1989 she was honoured with Padma Shri and in 2005 with Padma Bhushan award.
- Organised efforts for empowerment of women
Shri Mahila Griha Udyog ' Lijjat papad' is an organisation of, by and for women. Its objective is to provide dignified employment to women. The society was started with seven members in 1959 and today this society gives self-employment to thousands of women all over India with the sales turnover of many crores. It was also awarded 'Best village industry' and its products include khakhra, masala wadi, detergent powder, chapati, cake and many more products.

19. Kasturba Gandhi Balika Vidyalaya (K.G.B.V.)

- i. It was launched in August 2004 under SSA.
- ii. It helps in implementing Right to Education Act (R.T.E.)
- iii. Beneficiaries
 - Girls belonging to scheduled castes, scheduled tribes other backward classes and minorities.
 - Girls belonging to below poverty line families in educationally backward blocks and
 - Dropout girls from rural and remote areas
- iv. Objectives
 - To provide a safe educational environment for girls of backward classes and tribes,

- To educate dropout girls belonging to below poverty line families.
- To improve girls literacy rate.
- To help in implementing RTE Act of Government of India

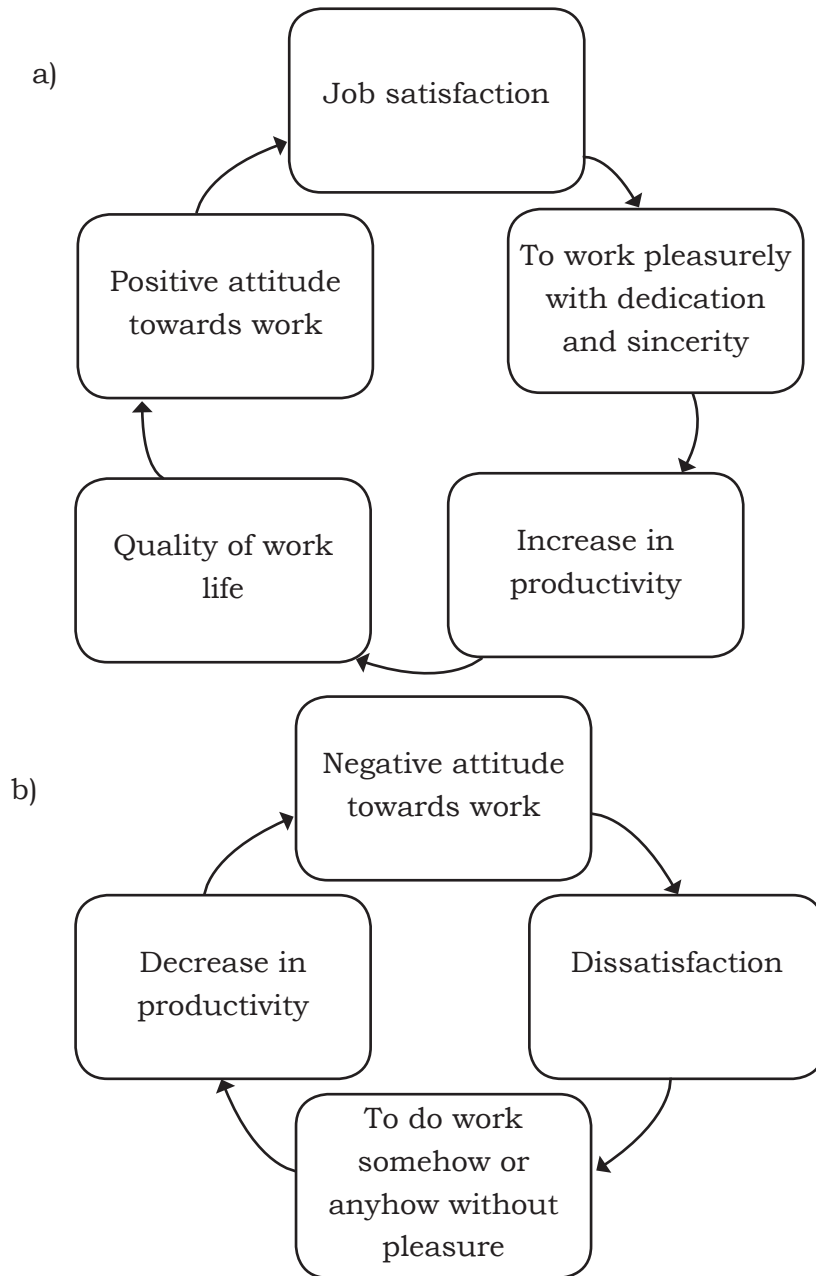
20. Beti Bachao Beti Padhao Yojana (B.B.B.P.)

- It was launched on 22nd January 2015 by Prime Minister of India, Sh Narendra Modi, at Panipat.
- It was started by a joint initiative of three ministries
 - Ministry of Women and Child Development (MWCD)
 - Ministry of Health and Family Welfare (MHFW)
 - Ministry of Human Resource Development(MHRD)
- Objectives
 - To eliminate gender biased sex selection that is prevent female foeticide.
 - To ensure safety, identity and security of girl child.
 - To ensure that every girl child gets quality education.
 - To ensure participation of girl child in every field of life along with education.
 - To improve child sex ratio.
 - To promote the development of Holistic environment for girl empowerment.
 - To break the gender stereotypes of Indian society

21. Attitudes and approaches to Work, Life skills and Quality of Work life.

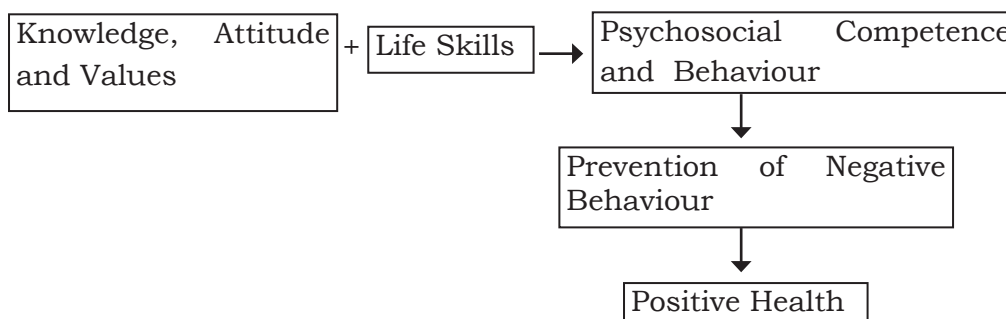
- Attitude towards work means one's perception about his work situation.
- Individual's experience of job satisfaction and dissatisfaction is considerably influenced by their attitude and perception about his work situation.
- When a person perceives his or her 'work' as a source of energy, fulfilment and learning, job satisfaction is ensured.

- iv. A person's work routine and his attitude towards the work affects the quality of work life



22. Life skills for livelihood

- i. Life skills are the abilities that enable individuals to deal effectively with the demands and challenges of everyday life.
- ii. These are important because they apply across the lifespan.
- iii. They help to cope up with the adverse situations of life.
- iv. They contribute in promoting health and development of people.
- v. These are also needed for effective functioning of community and society.
- vi. Life skills are acquired through experimental learning or experiences
- vii. Appropriate and adequate knowledge, attitudes and values enable one to develop healthy life skills and prevent negative health behaviour.



23. Ten core sets of skills identified by experts

- i. Self-awareness
- ii. Communication
- iii. Decision making
- iv. Creative Thinking
- v. Coping with emotions
- vi. Empathy
- vii. Interpersonal relationship
- viii. Problem solving
- ix. Critical thinking
- x. Coping with stress

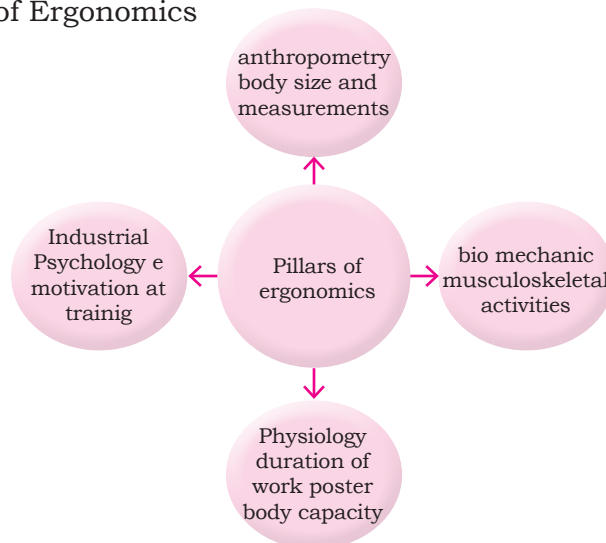
24. Essential soft skills at workplace

- i. Working productively: Sufficient knowledge, skills and expertise, experience, enthusiasm, zeal and dynamism help to increase the production

- ii. Learning effectively
 - Learning to use tools and strategies related to one's field
 - Updating oneself to keep pace with advances and development
 - Always ready to learn new skills to acquire information within the field and motivation to work hard.
- iii. Clear communication
- iv. Working cooperatively
- v. Thinking critically and creatively
 - Being innovative and creative
 - Analytical thinking and Critical evaluation
- vi. Concentration and alertness

25. Ergonomics/Human Factors Engineering

- i. Ergonomics is derived from two Greek words ergon (work) and nomics (natural laws)
- ii. It may also be called human factors engineering
- iii. It is adjustment of "Human and Machine"
- iv. Ergonomics is that branch of Engineering Sciences which involves application of biological science to achieve optimum mutual adjustment of human work with tools, machines and workstations for optimal human efficiency and wellbeing.
- v. Pillars of Ergonomics



- vi. Benefits of ergonomic
 - Increases productivity
 - Reduces errors / mistakes
 - Reduces risk of accidents and injuries
 - Increases work efficiency
 - Helps to decrease stress of the workforce
 - Helps to improve the morale of the workforce
 - Increases job satisfaction

26. Entrepreneurship

- i. Entrepreneurship is the act of creating a new and innovative enterprise/ product or service.
- ii. An entrepreneur is a person who converts any novel Idea (a product or a service) into reality and establishes an Enterprise.
- iii. An entrepreneur is innovative, creative, organised and risk taker.
- iv. Entrepreneurs use their acumen to establish resources and/ or finances and aim to make a livelihood.
- v. Entrepreneurs establish new organisation or revitalize the existing ones.
- vi. Characteristics of an Entrepreneur
 - Willingness to work hard
 - Knowledge and skills for planning and implementation.
 - Skills of management of finances, materials, personnel and time.
 - Courage to take calculated risks.
 - Ability and preparedness to handle many tasks simultaneously
 - Having good communication skills.
 - Ability to deal with tough issues and find the solutions,
 - Ability to cope with setback challenges and failures.
 - Being realistic and not expecting easy solutions.
 - Being flexible.

- vii. Examples of some entrepreneurs are Mr Narayan Murthy, J.R.D. Tata, Dhirubhai Ambani, Kiran Mazumdar Shaw

27. Social entrepreneurship

- i. Social entrepreneurship focuses on doing social good.
- ii. Social entrepreneurs work for the benefit of the underserved, neglected, disadvantage group of individuals.
- iii. Social entrepreneurs create basic social changes and sustainable improvements.
- iv. Their field of work are Education, Healthcare, Economic development, Environment, Arts or any other social field.
- v. The success of social entrepreneurship is ascertained by the social benefits and impact.

28. Definitions

- i. Work: Work can be described as an essential activity, undertaken for a purpose or out of necessity and which helps to develop one's identity in the society.
- ii. Meaningful work: Work which is useful to society or to others, is done responsibly and is enjoyable to worker is called the meaningful work.
- iii. Career: Career denotes the means and occupation by which an individual fulfils his basic needs and to achieve success in the chosen field, the person constantly learns new skills and obtains new information. He works hard to prove himself in his chosen field.
- iv. Livelihood: Livelihood refers to job, occupation and other means of work through which one earns money to meet the basic needs of himself and his family.
- v. Traditional occupations: Traditional occupations can be described as occupations practiced by successive generations, rooted in customs and practices of a community.
- vi. Life skills: Life skills are abilities for adaptive and positive behaviour of a person which help him to deal effectively with the demands and challenges of every day's life.

- vii. Ergonomics: Ergonomics is that branch of Engineering Sciences which involves application of biological science to achieve mutual adjustment of human work with tools, machines and workstations for optimal human efficiency and wellbeing.
- viii. Entrepreneurship: Entrepreneurship is the act of creating a new and innovative enterprise/product or service.

Full form of Abbreviations

- i. B.P.L. Below Poverty Line
- ii. I.P.R. Intellectual Property Right
- iii. E.R.A. Equal Remuneration Act
- iv. N.P.A. National Plan of Action
- v. R.T.E. Right to Education Act
- vi. S.S.A. Sarv Shiksha Abhiyan/ Samagra Shiksha Abhiyan
- vii. B.B. B.P. Beti Bachao Beti Padhao
- viii. K.G.B.V Kasturba Gandhi Balika Vidyalaya
- ix. I.L.O. International Labour Organisation
- x. K.V.I.C. Khadi and Village Industries Commission

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple Choice Questions

1. Which scheme has been launched under SSA or Samagra Shiksha for the girls living in adverse conditions and/or the drop out girls belonging to below poverty line families?
 - a. K.G.B.V.
 - b. B.B.B.P.
 - c. N.P.A.
 - d. M.D.M.

Ans a K.G.B.V.

2. An activity that is performed for a purpose or out of necessity is
 - a. Livelihood
 - b. Work
 - c. Career
 - d. Life skills

Ans b Work

3. _____ refers to biological categorization based on genetics and reproductive organs.
 - a. Gender
 - b. Sex
 - b. Male
 - d. Female

Ans b Sex

4. According to Section 48 of the Factories Act
- The creches should be maintained in a factory or industry if more than 30 women are employed in it.
 - Men and women have Right to get equal wages for the same work.
 - Equality of opportunity for both male and female for appointment to any office is guaranteed.
 - Security of all employees working in a factory is to be maintained

Ans a The creches should be maintained in a factory or industry if more than 30 women are employed in it.

5. Article_____of the Constitution of India guarantees equality of opportunities for all citizens in any office.
- 16(1)
 - 21
 - 25
 - 370

Ans a 16(1)

6. Which of the following is not a life skill?
- Communication
 - Creative thinking
 - Empathy
 - Lack of confidence

Ans d lack of confidence

7. _____are the behavioral abilities which enable people to work in challenging situations of life.
- Values
 - Attitude
 - Life skills
 - Negative behavior

Ans c Life skills

(B) Match the following

A Shola craft	i Kerala
B Channapatan dolls	ii Karnataka
C Warli painting	iii Odisha
D Coconut craft	iv Maharashtra

Pick the correct option

- a. A ii B ii C iv D i b. A ii B ii C i D iv
b. A i B ii C iv D i d. A iii B ii C i D iv

Ans a) A ii B ii C iv D i

(C) Fill in the blanks

1. _____ is adjustment of 'Human and Machine'
2. Ergonomics is derived from two Greek words _____ and _____
3. _____ is the art of creating a new and innovative enterprise / product or service.
4. The Supreme Court of India has recognized th _____ as a third gender.
5. Work done to earn money is generally called as _____

Answers

1 Ergonomics

2 ergon (work) and nomics (natural laws)

3 Entrepreneurship

4 transgender

5 livelihood

(D) Picture based question

1. Identify the art in the picture and tell with which state it is associated.



Ans Puppetry craft of Rajasthan

(E) Very short answer questions (1 mark)

1. What do you understand by meaningful work?

Ans Meaningful work refers to all such activities which contribute to personal growth, instills confidence and self-worth and which are beneficial for the society.

2. Write any two objectives of Beti Bachao Beti padhao Yojana.

**Ans i) To stop gender biased sex selection that is female feticide
ii) To ensure that every girl child gets quality education.**

3. State any two benefits of ergonomics.

Ans i) Increase in productivity

ii) Decrease in errors

4. Give one word for 'New ideas being effectively and successfully put to use'.

Ans Innovation

5. State any two issues related to women in modern India

Ans i) Double burden of family and job, resulting in stress and health issues.

ii) Maternity benefits and social support for child care.

Case study based questions (1 mark X 4)

Economic development is a strong desire of every person. Entrepreneurship plays an important role in the fulfillment of this desire.

Entrepreneurship fills the person with such virtues that he proves himself as a master of the industrial world and also becomes a part of the economic development of his country. An entrepreneur turns new ideas into reality. He draws resources with his sharp intelligence and sets an aim for his life. The founder of Paytm Company Mr. Vijay Shekhar Sharma is an example of an entrepreneur. He knew that in future, transactions would be done digitally.

1. The success of Social entrepreneurship is judged by
 - a. Financial benefit
 - b. Social impact
 - c. Popularity
 - d. Knowledge of entrepreneur

Ans b Social impact

2. What is not important for an entrepreneur to attain his goal?
 - a. Positive attitude
 - b. Ego
 - b. Satisfaction
 - d. Financial benefit

Ans b Ego

3. Which of the following is not an example of entrepreneur?
 - a. Mr. Narayan Murthy
 - b. Mr. Dhirubhai Ambani
 - b. Mr. Morarji Desai
 - d. Mr. J.R.D. Tata

Ans c Mr. Morarji Desai

4. Which of the following statement is not correct?
 - a. An entrepreneur should have the courage to take calculated risk.
 - b. Good communication skills are necessary for the success of an entrepreneur.
 - c. An entrepreneur should be goal oriented.
 - d. Successful entrepreneurs are not realistic.

Ans d) Successful entrepreneurs are not realistic.

Short answer questions (2 marks)

1. Write any four ways which help to understand the work.

Ans i) A job and livelihood for most of the people.

ii) A means for self-creativity.

iii) A symbol of status power and control.

iv) a source of pleasure and complete mental satisfaction.

2. Enumerate any four points to be kept in mind while selecting a career.

Ans i) Special talents, traits and interests of the person.

ii) Selected occupation to give the person a sense of being useful.

- iii) work should be stimulating and challenging for the person.**
- iv) ethos and environment of the workplace.**

3. What is the contribution of a housewife in the economy of the family/
Why the domestic work done by women should be considered as financial contribution in the family?

Ans i) Women fulfill the needs of family.

- ii) Support and motivate the family memnbers in all stages of their life so that they can do their work efficiently.**
- iii) Perform household chores and contribute to family resources.**
- iv) judiciously use resources and save money.**

4. Write the four pillars of Ergonomics.

Ans i) Anthropometry (body size and measurements).

- ii) Biomechanics (Musculoskeletal activities and forces exerted).**
- iii) Physiology.**
- iv) Industrial Psychology.**

5. Write any two reasons for extinction of Indian traditional occupations?

Ans i) Gradual erosion of aesthetic appreciation of Fine Arts.

- ii) Insufficient finance and marketing services.**

Short answer questions (3 marks)

1. How can the traditional occupations of India be improved?

Ans Ways for improvement in these occupations.

- i) Establishment of training facilities.**
- ii) Design innovations.**
- iii) Use of Eco friendly raw materials.**
- iv) Preservation and refinement strategies.**
- v) New and attractive packaging.**
- vi) Protection of intellectual property right**

2. Beti bachao Beti Padhao Scheme is a joint initiative of which three ministries?

Ans i) Ministry of Women and Child Development.

ii) Ministry of Health and Family Welfare.

iii) Ministry of Human Resource Development.

3. How will women get recognition in the family and the society?

Ans i) The mindset has to be modern.

ii) The domestic work done by women need to be valued as an economic contribution.

iii) All family members to be involved and be responsible for household work.

iv) increase in literacy rate of women.

v) The attitude and approach of society has to be changed.

vi) Posting women on high and prestigious posts.

Long answer questions (4 marks)

1. What are the government initiatives in favour of women?

Ans. Refer to Points to Remember No. 17B

2. What is the full form of K.G.B.V. Scheme? When was it started? Write its beneficiaries and objectives.

Ans. Refer to Points to Remember No. 19

Long answer questions (5 marks)

1. What are life skills? Write their contribution in success of an entrepreneur. Enumerate any 6 life skills.

Ans. Life skills are abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life.

Need of Life skills for an entrepreneur

- i. Life skills help an entrepreneur to deal effectively with challenging or adverse situations faced during establishment of an enterprise.**

ii. They help to prevent negative behaviour.

Ans. Refer to Points to Remember No. 23

2. Rohit is a manager in a factory. Explain in detail what soft skills he needs to develop for progress in his field.

Ans. Essential soft skill he should develop are—Refer to Points to Remember No. 24

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice questions

- The abilities that enable individuals to deal effectively with the demands and challenges of everyday life are called
 - Mood
 - Life skills
 - Attitude
 - Entrepreneurship
- Which of the following is not a traditional occupation of India?
 - Agriculture
 - Visual art
 - Journalism
 - Embroidery
- The attitude of an individual towards his work may be viewed as
 - Macro perspective or outlook
 - Micro perspective or outlook
 - Negative outlook
 - Positive outlook
- An individual's experience of job satisfaction or dissatisfaction is comfortably influenced by their_____.
 - Attitude
 - Work
 - Capability
 - Finance
- The full form of N.P.A. is
 - National plan of action
 - National Property Act
 - New plan of Action
 - National Productive Activities

(B) Match the following

- | | |
|------------------------------------|---|
| A. Adjustment of Human and Machine | i. life skills |
| B. A medium for one's creation | ii. work |
| C. Clear communication | iii. organized effort of empowerment of women |
| D. Griha Udyog Lijjat papad | iv. ergonomics |
| E. Kiran Mazumdar Shaw | v. an eminent women entrepreneur |

Pick the correct option

- | | |
|----------------------------|----------------------------|
| a) A i B iii C ii D iv E v | b) A iv B ii C i D ii E v |
| c) A iv B ii C i D v E iii | d) A ii B i C iv D v E iii |

(C) Fill in the blanks

1. Kasturba Gandhi Balika Vidyalaya helps to implement _____ act of Government of India passed in 2009
2. _____ is the act of creating a new and innovative enterprise/ product or service.
3. A person's feeling of satisfaction or dissatisfaction from his job is influenced by _____ .
4. Coconut craft is a traditional occupation of _____ state.
5. The main objective of Social entrepreneurship is _____ .

(D) Identify the craft in the picture and write the name of the state in which it is popular?



(E) Very short answer questions (1 mark)

1. Write any two ways through which we can understand work.

2. Enumerate any two traditional occupations of India.
3. Give the full form of R.T.E.
4. State any two skills necessary for livelihood.

Case study based questions (1 mark X3)

Gender inequality is the main social issue in India. Women's empowerment needs to be accelerated to bring men and women at par. The upliftment of women in all sectors should be included in the Nation's priority. For women empowerment, they should be made aware of the facilities and their rights so that their future can be better. There is also a need to publicize the importance of girls and their education to realize the dream of women empowerment

1. Which scheme has been started by government of India to stop female foeticide?
 - a. B.B.B.P
 - b. K.G.B.V.
 - c. M.D.M.
 - d. F.S.I

Or

Which scheme has been launched under S S A or Samgra Shiksha for the girls living in adverse conditions and/or the drop out girls belonging to below poverty line families?

- a. K.G.B.V.
 - b. B.B.B.P.
 - c. M.D.M
 - d. N.P.A
2. _____ article of the Constitution of India guarantees equality of opportunity for all citizens in matters relating to employment and appointment in any office.
 - a. 16(1)
 - b. 21(a)
 - c. 25
 - d. 16(4)
3. The full form of E.S.I. is
 - a. Equal Remuneration guarantee
 - b. Employee State Insurance
 - c. Employee State Income
 - d. Essential State Insurance

Or

A _____ for women was taken up by the department of social welfare to implement the equal remuneration act

- a. N.P.A. b. S.S.I.
- c. N.Y.B. d. K.Y.C

Short answer questions (2 marks)

1. Differentiate between Gender and sex.
2. Who are entrepreneurs? Give any two examples of entrepreneurs.
3. Which aspects are considered in ergonomics?
4. Write any four initiative taken by government of India for women empowerment.

Short answer questions (3 marks)

1. Define the word "work", Write any four factors affecting work.
2. Give the full form of K.G.B.V. scheme and write its objectives.
3. Enumerate any six benefits of ergonomics.

Long answer questions (4 marks)

1. How does the attitude and outlook of a person affect the work quality?
2. Define ergonomics. Write any six benefits of ergonomics.
3. What are life skills? Explain their significance in brief.

Long answer questions (5 marks)

1. What do you understand by entrepreneurship? Write the characteristics of an entrepreneur.
2. Differentiate between work, livelihood and career. Write the factors to be considered while selection of a career.
3. Explain some traditional occupations of India. Give reasons for their extinction and state the strategies that can be used for their revival.

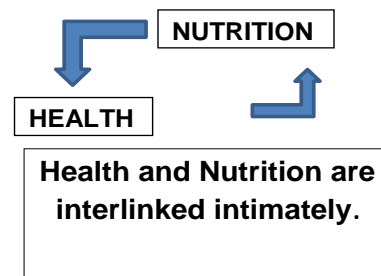
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2. CLINICAL NUTRITION AND DIETETICS

‘POINTS TO REMEMBER’

1. Nutrition:

- i. Nutrition is the science of food, nutrients and other substances as well as their digestion, absorption and utilization by the body. Nutrition is also concerned with the social, psychological and economic aspects of food and eating.
- ii. Optimum Nutrition/Good Nutrition/Adequate Nutrition is important -
 - For providing immunity
 - Protection from infection
 - To promote recovery from a variety of illnesses as well as
 - Managing chronic diseases
- iii. Inadequate Nutrition/Poor Nutrition
 - Difficulty in maintaining immune defences thus makes existing problems worse.
 - Difficulty in Healing wounds,
 - Delay in treatment,
 - Difficulty in smooth functioning of various organs causes new health problems
- iv. Diet and good nutrition (as well as a healthy lifestyle) can control and delay the age of onset of chronic diseases.



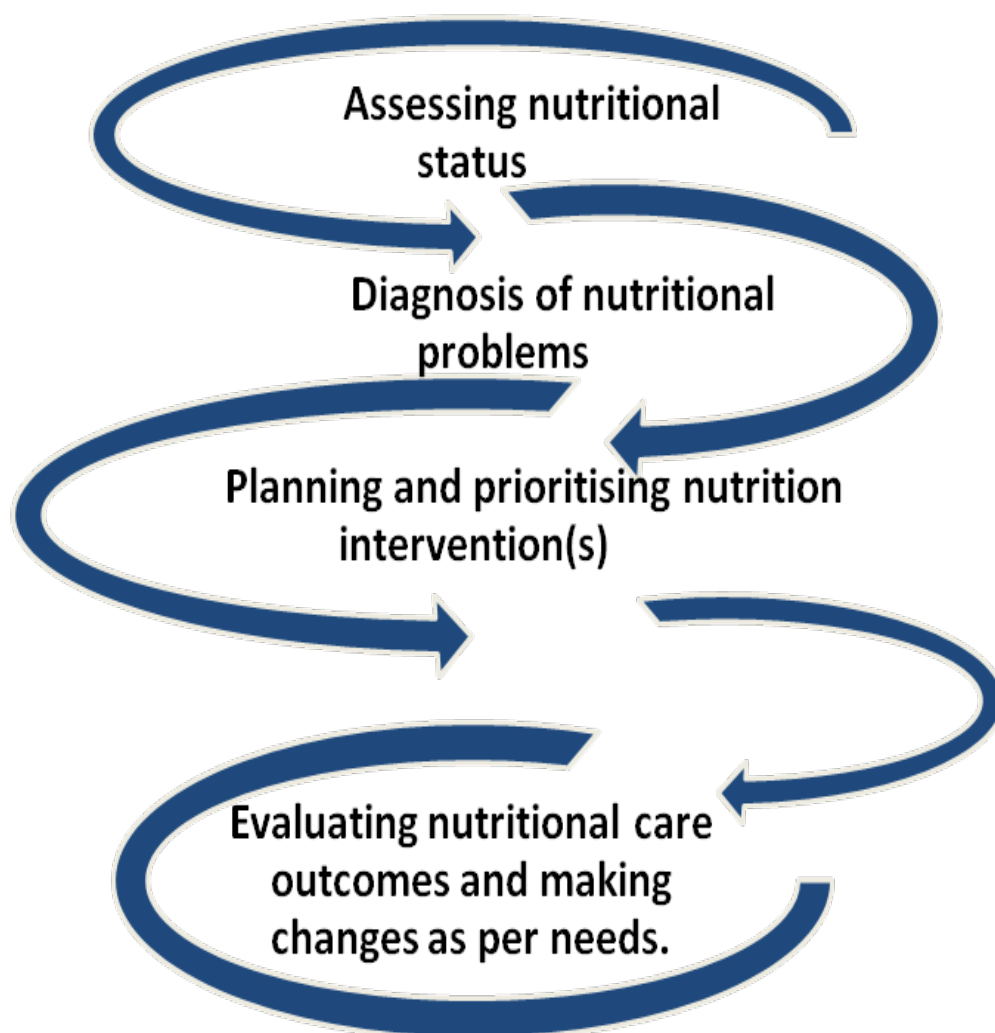
2. Clinical Nutrition:

The specialised area of nutrition which deals with nutrition during illness is 'Clinical Nutrition'. In recent times, this field is called Medical Nutrition Therapy.

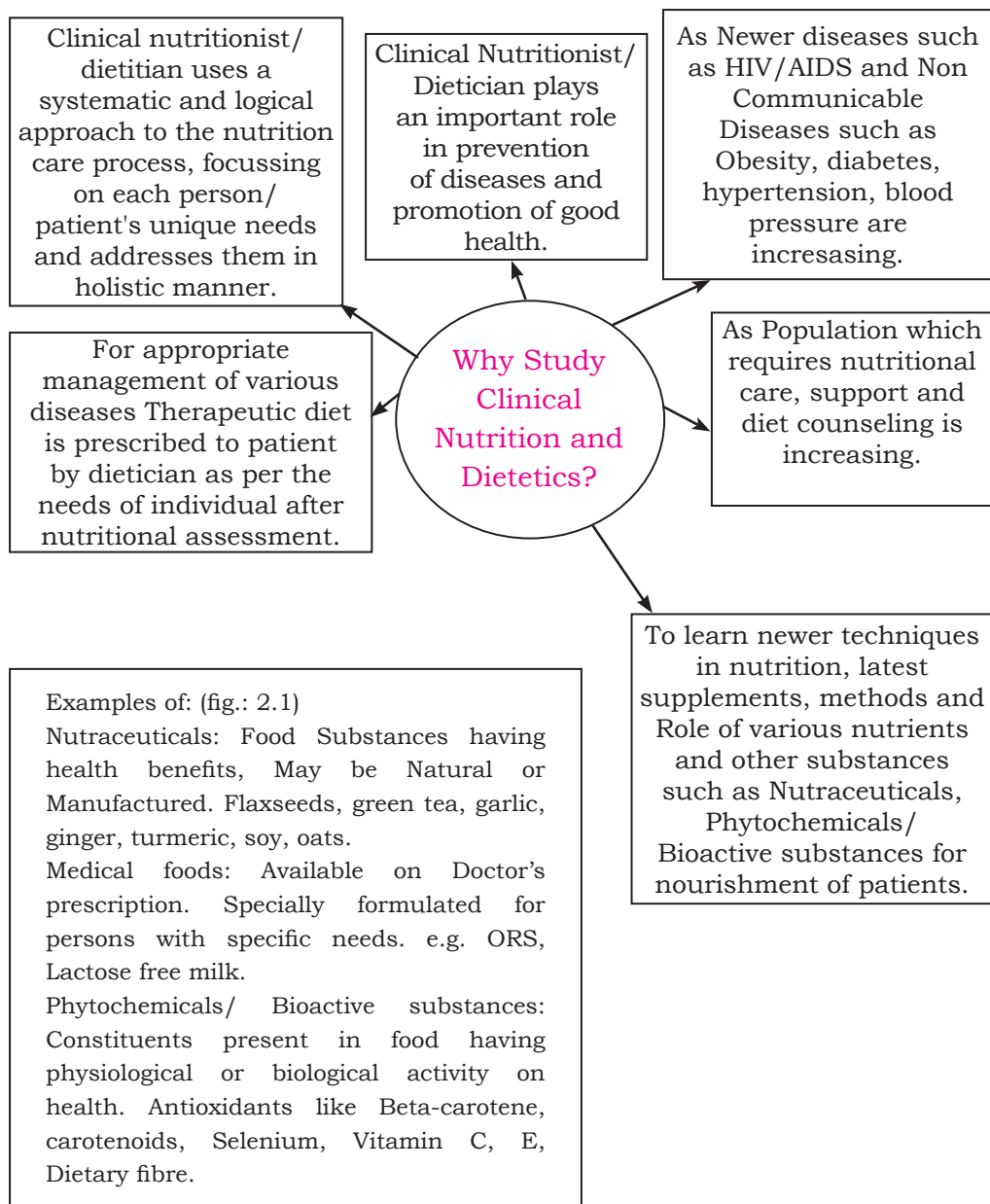
3. Dietetics

- i. This is the science that explains how food and nutrition affect human health.
- ii. Dietician assesses, diagnoses and treats nutritional problems. These licensed professionals provide optimal nutritional care and health care.

4. Nutritional Care: Nutritional care during illness is an organised group of activities which involves



5. SIGNIFICANCE OF CLINICAL NUTRITION AND DIETETICS



6. Diet Therapy

Diet therapy is a branch of dietetics concerned with the use of food for therapeutic purpose. It is concerned with nutritional requirements of patients suffering from different diseases and prescribing the right type of diet for them.

The objectives of Diet therapy are —

- i. Plan a diet keeping in mind the patient's food habits.
- ii. Changes to the current diet to improve and keep the condition of the disease under control.
- iii. Correction of nutritional deficiencies.
- iv. Prevention of short-term and long-term complications in case of chronic diseases.
- v. Education and counselling of the patient to follow the prescribed diet.

7. Nutrition Assessment-

Assessment based on the following information on the nutritional status and nutritional needs of the patient-
(in A B C D order).

Anthropometric measurements.

- i. Height, weight and other physical measurements.

Biochemical Assessment

- ii. Relating the information on biochemical testing (blood, stool, etc.) and physical measurements with the above and the physician's diagnosis.

Clinical Assessment

- iii. To get detailed information about the health, diet, personal and medical history of the patient.

Disease Identification

- iv. Interpreting all of the above to identify potential nutritional deficiencies and risk of future deficiencies.

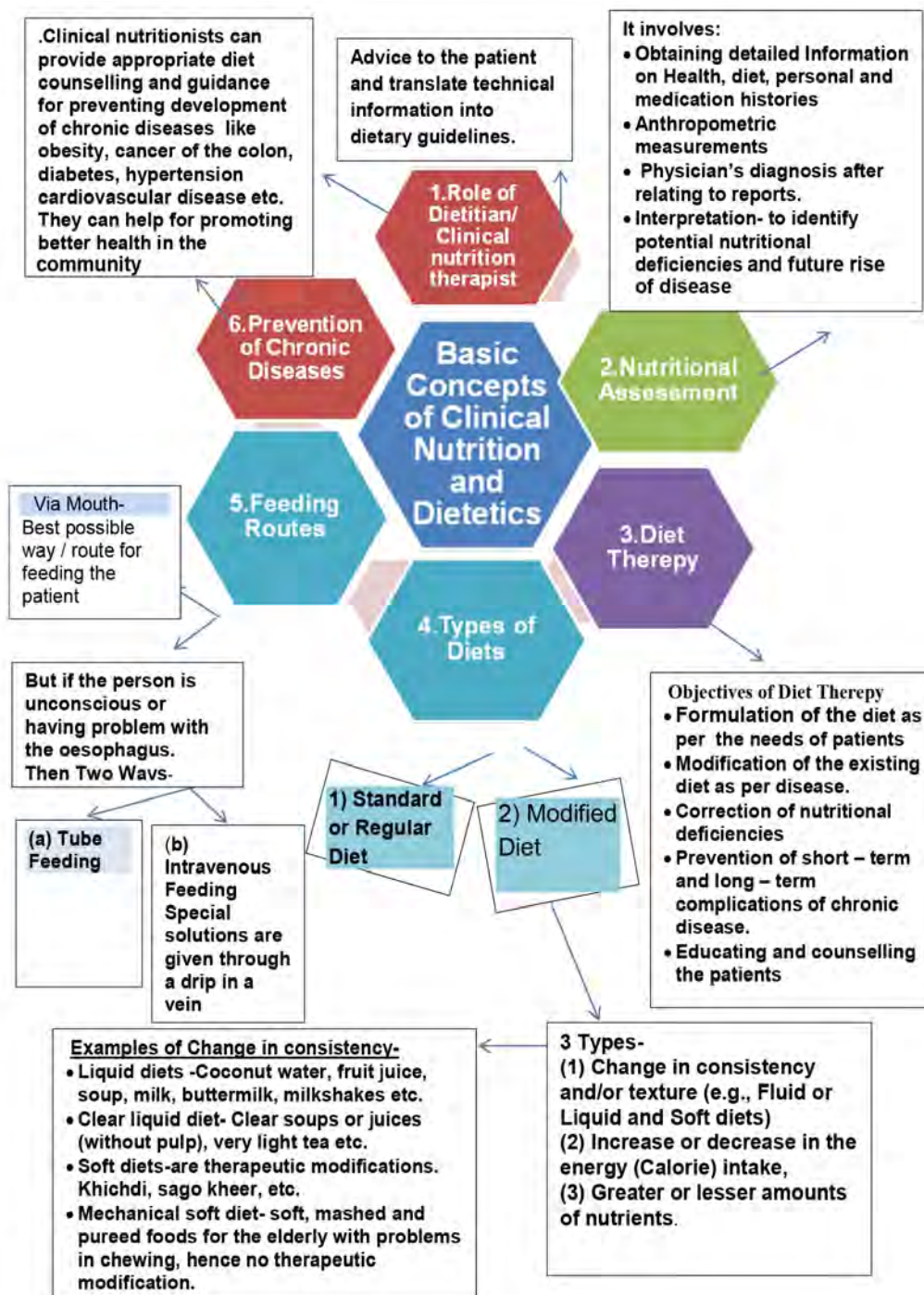
8. Some factors that Dietitian consider while modifying diets for patients:

- i. The pattern of food, the frequency of receiving different types of food, the diagnosis of the disease and the prescription given by doctor.
- ii. Health conditions and physical condition including the ability to eat, chew, swallow digest and absorb the frequency of food intake of various types, feeling of appetite and the like and dislike of the person.
- iii. Feeling of hunger, physical activities and lifestyle, occupation, cultural, ethnic practices, socio-economic background, and religious belief.
- iv. Nutritional stress.
- v. Psychological stress.
- vi. Dietary and other food items.

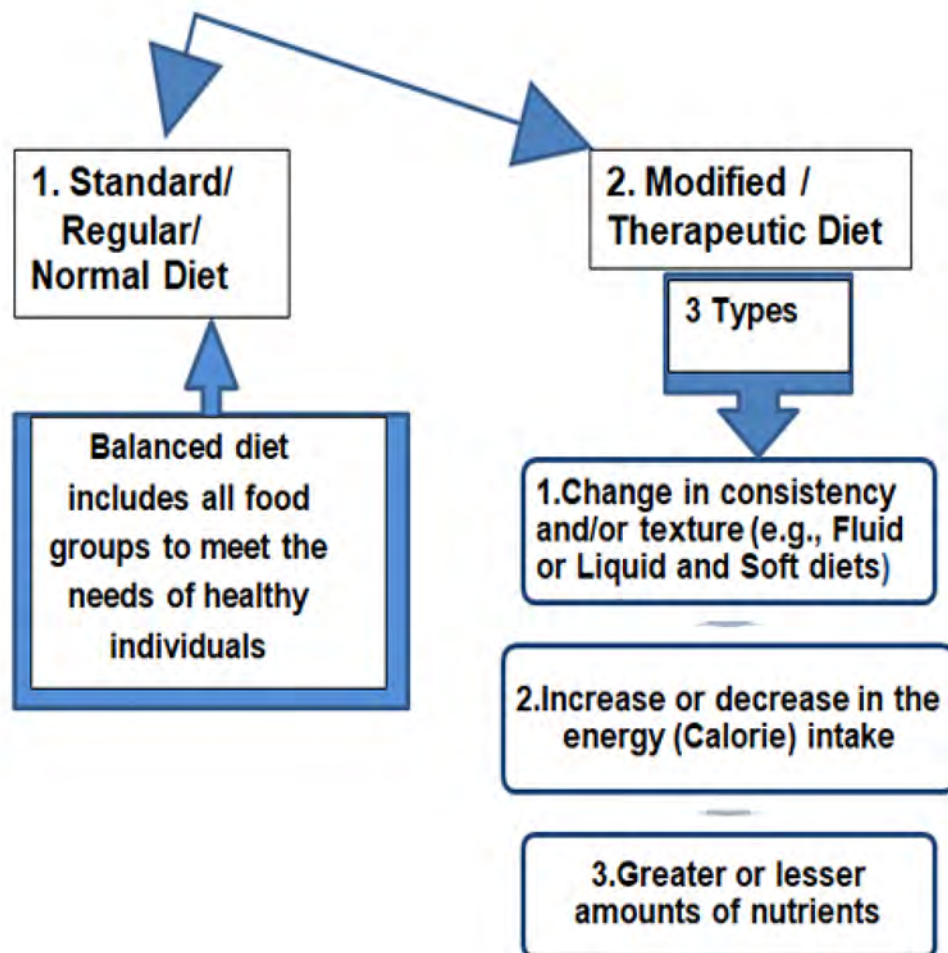
9. Role of Clinical Nutritionist/Dietitian

- i. By assessing the nutritional status of the patient, analysing nutritional needs, advising, and converting technical information written by the doctor into dietary guidelines.
- ii. Patients who have to undergo surgery need nutritional interventions and dietary supplements before and after surgery.
- iii. It is also the responsibility of the medical nutritionist to ensure that the patient is getting proper diet and adequate nutritional care. Also, to ensure as well to develop nutritional care plans and implement them by giving proper instructions to the patients during hospital admission or in outpatient department (OPD).

10. Basic Concepts of Clinical Nutrition and Dietetics



11. Types of Diets:






12. Therapeutic Diet/ Modified Diet

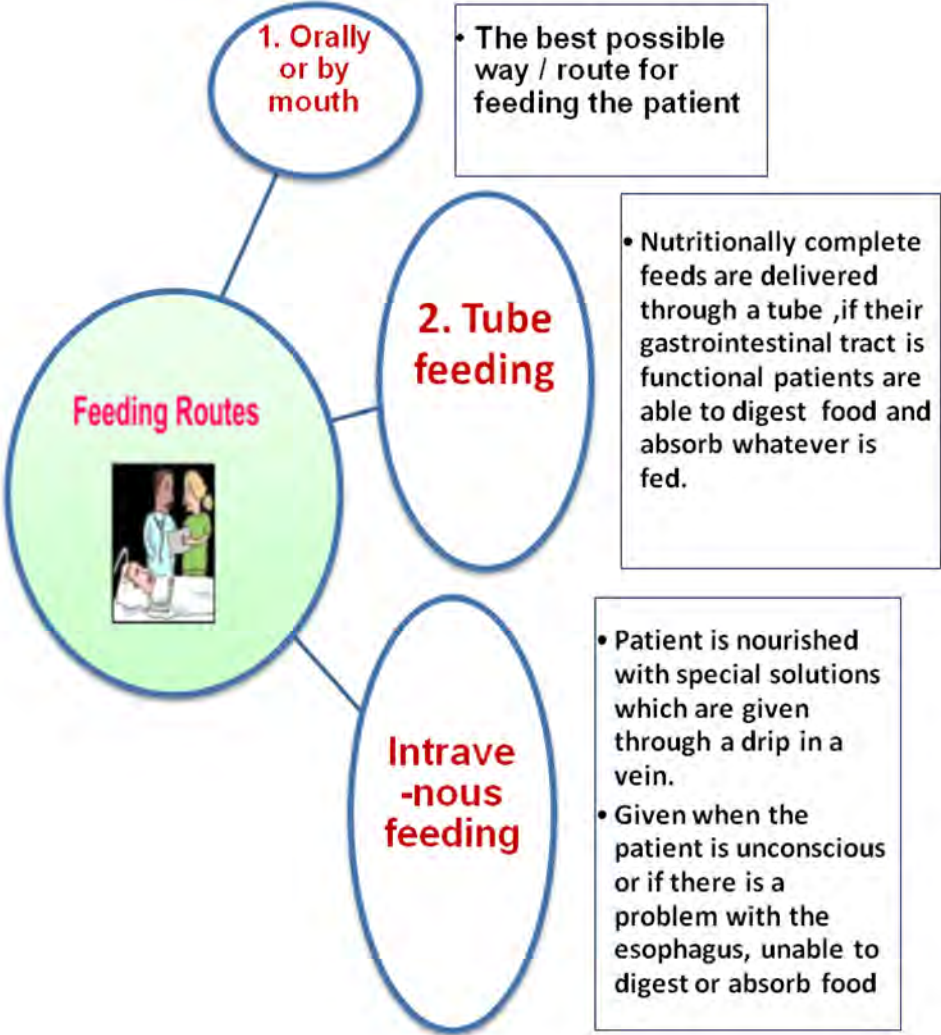
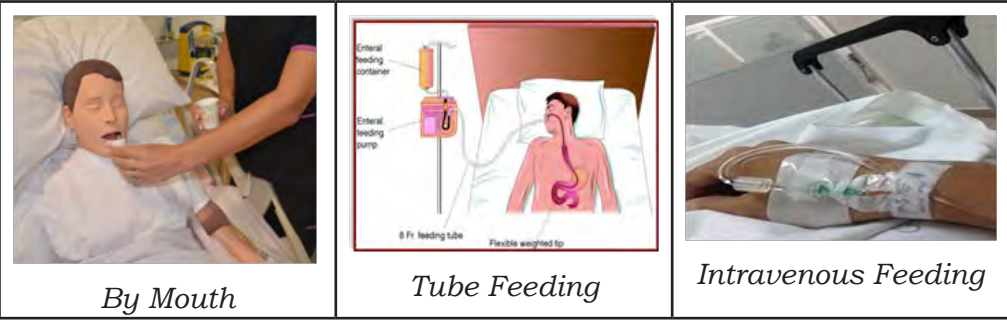
Therapeutic Diet/ Modified Diet is a meal plan that controls the intake of certain foods or nutrients and is adjusted to meet the medical needs of a patient. It is part of the treatment of a medical condition and is normally prescribed by a physician and planned by a dietician. A therapeutic diet is usually a modification of a regular diet.

13. Examples of 3 types of Modified Diets

1. Change in consistency and/or texture	2. Increase or decrease in the energy (Calorie) intake	3. Greater or lesser amounts of one or more nutrients
<p>1) Liquid diets: are fluid in</p> <ul style="list-style-type: none"> consistency at room temperature. <p><u>Advantage</u></p> <ul style="list-style-type: none"> Nutrients are easily absorbed if the gastrointestinal tract is functioning normally. Advised for persons who are unable to chew or swallow. <p><u>Examples</u></p> <p>Coconut water, fruit juice, soup, milk, buttermilk, milkshakes etc.</p> <p>2) Clear liquid diet: A variation of liquid diet is clear liquid diet, which is even more thin in consistency.</p> <p><u>Advantage</u></p> <ul style="list-style-type: none"> Prescribed just after surgery. <p><u>limitation</u></p> <ul style="list-style-type: none"> it is not easy to meet the nutritional requirements of the person completely. <p><u>Examples</u></p> <ul style="list-style-type: none"> Clear soups or juices (without pulp), very light tea etc. 	<ul style="list-style-type: none"> Increase in the energy / Calorie intake. <p><u>Example</u></p> <ul style="list-style-type: none"> Diet given in Fever. Decrease in the energy / Calorie intake. <p><u>Example</u></p> <ul style="list-style-type: none"> Diet given in obesity. 	<p><u>Examples</u></p> <ol style="list-style-type: none"> Increase in protein intake in case of surgery Lower protein intake in case of kidney failure, High or low in fibre, lower fat intake in Jaundice restriction in sodium intake, restriction in fluid intake, restricted intake of certain foods e.g., Spinach, because spinach is rich in oxalates

<p>1.Change in consistency and/or texture</p>	
<p>3) Soft diets-provide soft but solid foods that are lightly seasoned, do not contain much fibrous or gas forming foods.</p> <p>Advantage</p> <ul style="list-style-type: none"> • Such diets are easy to chew and digest. They are simple therapeutic modifications with no harsh fibre, high fat, or spicy foods. <p>Examples</p> <ul style="list-style-type: none"> • Khichdi, sago kheer, custard etc. <p>Mechanical soft diet-</p> <ul style="list-style-type: none"> • When certain modifications are made for normal adults in the older age group having problem in chewing. There is no therapeutic modification in it. The change is in cooking method. <p>Examples</p> <ul style="list-style-type: none"> • Soft, mashed, stewed, and pureed foods, fruits and vegetables. 	<div></div> <div></div> <p><i>Liquid Diet Fruit and Vegetable Juice</i></p> <div></div> <p><i>Soft Diet Sabudana Kheer</i></p> <div></div> <p><i>Mechanical soft diet pureed foods</i></p>

14. Feeding Routes:



15. Prevention of chronic diseases

- i. Proper diet, good nutrition and healthy lifestyle can delay the control and onset of chronic diseases.
- ii. Clinical nutrition practitioner helps in preventing chronic diseases and enhancing better health care in the community by proper dietary counselling. Examples of chronic diseases-obesity, cancer, diabetes, heart disease, HIV/AIDS and hypertension etc.

16. The study of medical nutrition and dietetics enables professionals to:

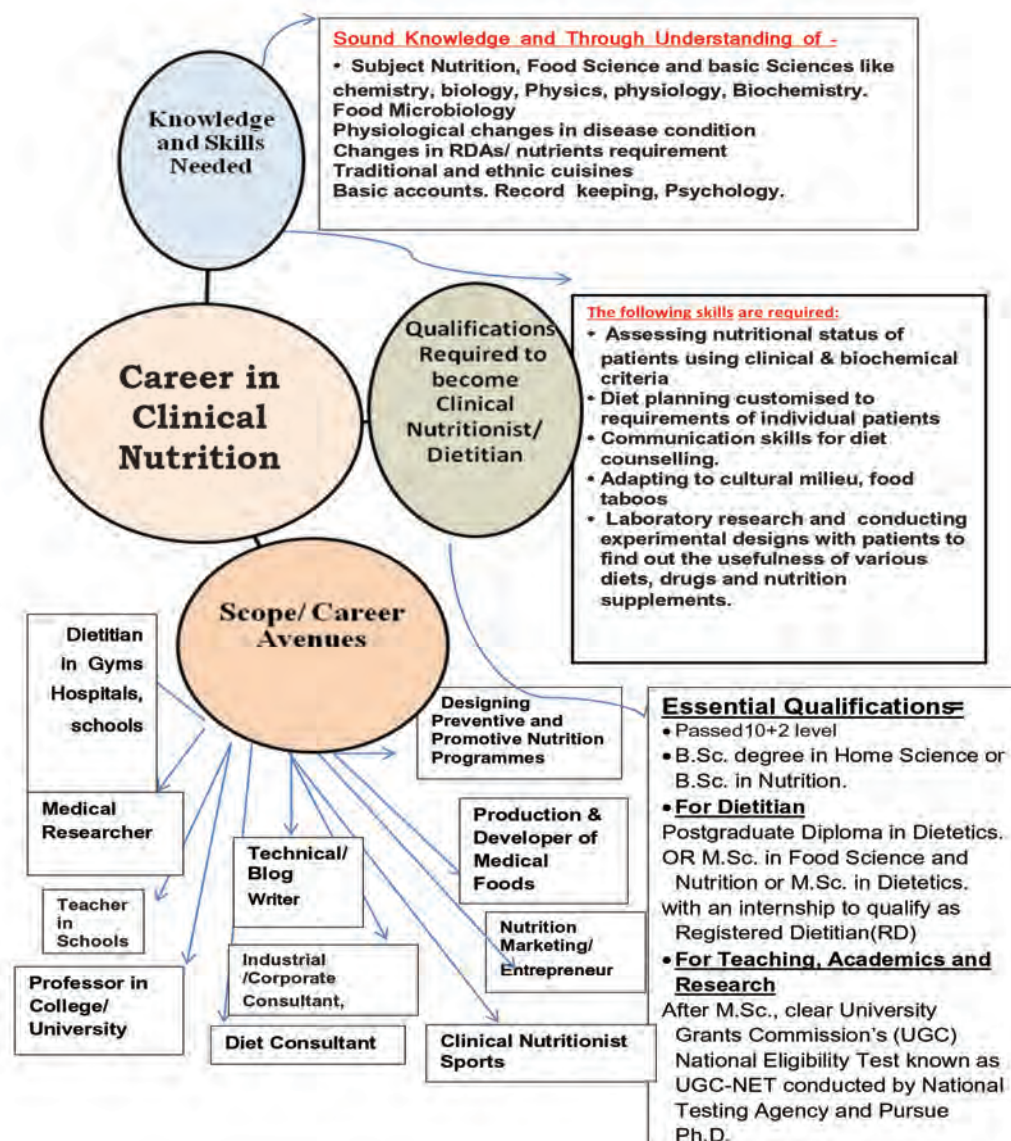
- i. Making diet plans to meet the nutritional needs of patients.
- ii. Modifying the diet in various disease conditions
- iii. Create diet plans for players, persons working in space, submarines, defence service, industries.
- iv. Promote health and well-being of patients admitted to hospital or in outpatient clinics as well as in institutional settings.
- v. Management of diet services in institutions like old age homes, schools, orphanages etc.
- vi. Promoting health to prevent complications and improve quality of life for patients with long-term illnesses.

17. Scope of Clinical Nutrition and Dietetics-

- i. Nutritionist in Clinical Nutrition and Dietetics
- ii. Dietician with dietary consultants or physicians
- iii. Teacher or Academic Researcher
- iv. Consultants in industries or companies
- v. Food Service Providers/ Hospitals manager

Medical research develops drugs, nutritional supplements and drugs, medical foods, tube-related foods, various nutritional support formulas.

18. Career in Clinical Nutrition and Dietetics





Nutraceuticals
Natural or Manmade
Example: Garlic



Medical foods
lactose free milk



Phytochemicals /
Bioactive substances
beta carotene, carotenoids,
selenium vitamin, E

Fig. 2.1



Liquid diet
Fruit and vegetable
juice

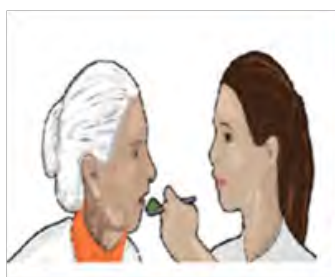


Soft diet
Khichri



Mechanical soft diet
Mashed fruits and
vegetables

Fig. 2.2



feeding through the
mouth



complete food
through pipe



intravenous feeding

Fig. 2.3

Full name of abbreviations.

1	HIV	Human Immunodeficiency Virus
2	AIDS	Acquired Immuno deficiency Syndrome.
3	OPD	Out Patient Department
4	IV	Intravenous
5	MNT	Medical Nutrition Therapy
6	RDA	Recommended Dietary Allowances
7	RD	Registered Dietitian
8	B.Sc.	Bachelor of Science
9	M.Sc.	Master of Science
10	Ph.D.	Doctor of Philosophy
11	UGC	University Grants Commission
12	NET	National Eligibility Test
13	SET	State Eligibility Test

OBJECTIVE TYPE QUESTIONS (1 MARK)**(A) Multiple-choice questions**

1. An elderly woman uses dentures. What kind of foods will you include in her mechanical soft diet?
- a. Mashed and pureed foods b. Clear liquid Foods
c. All kinds of foods d. high fiber foods

Answer a) Mashed and pureed foods

2. _____ come under anthropometric measurement.
- a. Blood, urine- stool, sputum b. Height, Weight
c. Head circumference, BMI. d. Both b. and c.

Answer d) Both b and c

3. The science that deals with the food, nutrients, and other substances as well as their digestion, absorption and utilisation by the body is called _____.
- a. Public nutrition b. Clinical nutrition
c. Medical nutrition therapy d. Nutrition

Answer- d) Nutrition

4. Ravi's father's gastrointestinal tract is functioning normally after surgery, but he has discomfort swallowing. Which of the following feeding methods would be suitable for him so that he could get complete nutrition?
- by intravenous
 - by tube
 - Only completely liquid foods orally
 - by mouth

Answer - b. by tube

(B) Match the following

- | | |
|-----------------------------------|-----------------------------|
| A. In case of diabetes | i) Low protein rich diet |
| B. In case of surgery | ii) Low sodium rich diet |
| C. In case of high blood pressure | iii) High protein rich diet |
| D. In case of kidney failure | iv) Low carbohydrate diet. |

Pick the correct option -

- A - iii), B - iv), C - i), D - ii)
- A - iv), B - i), C - iii), D - ii)
- A - ii), B - iv), C - i), D - iii)
- A - iv), B - iii), C - ii), D - i)

Answer - d) A - iv), B - iii), C - ii), D - i)

(C) Fill in Blanks

1. Clinical nutrition is known as_____nowadays.

Answer: Medical Nutrition Therapy

2. Fish has high amounts of omega-3 fatty acids, which can protect the heart from deadly diseases like_____.

Answer: Cardiac Arrhythmias (abnormal heart rhythm)

3. A certificate of eligibility for_____can be obtained after passing a postgraduate diploma in dietetics and completing an internship.

Answer: 'Registered Dietitian'

4. _____means that the patient is nourished with special solutions which are given through a drip in a vein.

Answer: Intravenous feeding

5. The_____is the primary focus of the nutritional care process.

Answer- Patient

6. A regular diet is one that includes all groups of foods and meets the needs of healthy individuals.

Answer: Standard or Regular Diet

(D) Picture Based Questions -

1. Identify the picture and state that it comes under which category of special foods that are beneficial for health.



Answer- Medical foods

2. Identify the picture and name the method of feeding the patient shown here.

Answer - By Mouth



(E) Very short answer question-

1. Give an example of Nutraceuticals and Phytochemicals.

Answer-

- (i) Nutraceuticals dairy products (e.g., milk, yogurt) and lemon, oranges, Green Tea (Any one example)
 - (ii) Phytochemicals/Bioactive compounds- beta-carotene, selenium, vitamin E and vitamin C (Any one example)
2. Mrs. Arora's daughter, after obtaining the qualification of dietician, can work in which two institutions?

Answer-

- (i) Dieticians with consultants / physicians in health clubs or gymnasiums
 - (ii) Dietitians in hospitals including specialty departments
 - (iii) Dietitians in catering services for hospitals, schools, industrial canteens, etc. (Any other, any two)
3. Which two new diseases have emerged in the twentieth and twenty-first centuries?

Answer - HIV / AIDS, Ebola, Swine Flu, S.A.R.S., Covid-19 (Any other, any two)

4. Name any two chronic diseases related to lifestyle.

Answer - Obesity, diabetes, heart disease, hypertension (Any other, any two)

5. Give two reasons that increase the risk of high blood pressure.

Answer-

- (i) Use of high salt foods
- (ii) Use of processed foods with high sodium content
- (iii) Low use of potassium-rich fruits, vegetables, grains, and pulses
- (iv) Low calcium ingestion
- (v) Reduced physical activity and stress. (Any other, any two)

Case study based multiple-choice questions (4 x 1 mark) .

Medical foods are those products that are specially manufactured for the specific dietary management of a disease can be used only with a doctor's prescription but are not considered as drugs.

- Some examples of Medical foods are special infant formulas, formulations for metabolic disorders, oral rehydration products or products for chronic diarrhoea, and special nutritional formulas for patients with diabetes, AIDS, kidney disease, or inborn errors in metabolism.
- Traditional Medical foods are typically in the form of liquids or powdered drink mixes.
- There are also many Medical foods developed over the past few years as more and more diseases have been emerged.

1. Ingredients or non-nutrients constituents present in foods that have physiological or biological activity and influence health are called_____.

- a. Non-dietary components
- b. Nutraceuticals
- c. Medical foods
- d. Phytochemical

Answer - d) Phytochemical

2. What are some parts of natural foods or manufactured food products which are added to specific substances for health benefits called?

- a. Mechanical soft diet
- b. complementary diet
- c. Nutraceuticals
- d. Bioactive substances

Answer - c) Nutraceuticals

3. Carrots and spinach are rich in which antioxidant?

- a. Selenium
- b. Vitamin D
- c. beta-carotene
- d. Retinol

Answer - c) Beta-carotene

4. Which of the following statements is incorrect?

- a. Eating fruits, vegetables and pulses reduces the risk of heart disease.
- b. ORS and lactose-free milk are examples of medical foods.
- c. Highly refined foods are beneficial for health.
- d. Vitamin E and vitamin C play a protective role in the body.

Answer - c) Highly refined foods are beneficial for health.

Short Answer Questions (2 marks)

1. What methods does a trained dietician or medical nutritionist employ for a professional medical nutritional care?

Answer –

A trained clinical nutritionist / medical nutritionist plays an important role in the management of various diseases and in providing professional medical nutritional care.

- i. They focus on the specific needs of each person / patient in a systematic and reasonable manner and only the patients are the

primary focus of their nutritional care process.

- ii. They assess nutritional status and plan to diagnose nutritional problems.
 - iii. They use dietetics for the overall improvement of patients' health, by converting technical information into dietary guidelines.
 - iv. Changes in the plan by evaluating the outcomes of nutritional care.
 - v. They provide advice to patients and, if necessary, help them maintain good nutritional status and stay healthy at various stages of the life cycle from womb to death (i.e., pregnancy, neonatal and childhood to old age).
 - vi. For patients who have to undergo an operation, they prioritize nutritional intervention before and after surgery, and suggest dietary supplements. (Any other, any four)
2. What are medical foods? Explain by giving two examples.

Answer-

Medical foods are products that-

- i. Designed specifically for the specific dietary management of a disease, those with prescription only can be used but are not considered as drugs.
- ii. These are usually in the form of liquid or powdered drinks mixes. (Any other, any two)

Some examples of medical foods-

- i. Special infant food
 - ii. Products for life-saving solution (ORS-oral rehydration solution) or long-term diarrhea
 - iii. Special nutritional products for patients with diabetes, AIDS, kidney disease or metabolic or congenital errors
 - iv. Lactose free milk etc. (Any other, any two)
3. Write any two main reasons, because of which the number of diabetes patients in the country is continuously increasing and India can become the 'Diabetes Capital' of the world?

Answer-

There are two main reasons for the continuous increase in the number of diabetic patients in the country.

- i. Many substances which contain fat and/ or sugar are added in the foods that we are consuming today.
 - ii. Intake of highly refined foods and less use of fibrous food.
 - iii. Excessive deficiency of vitamins and minerals in the diet.
 - iv. Increased use of animal protein in non-vegetarians.
 - v. Inappropriate lifestyle.
 - vi. Lack of physical activity or exercise (Any other, any two).
4. Describe any two problems arising from inadequate nutrition/ poor nutrition.

Answer-

Insufficient nutrition / two problems due to poor nutrition.

- i. Complications of health problems due to lack of immunity defense for the body.
- ii. Difficulty in wound healing.
- iii. Delay in treatment of the disease.
- iv. Difficulty in smooth functioning of various organs causing new health problems. (Any other, any two).

Short Answer Questions (3 marks)

1. Which is the best way to feed the patient? Explain the difference between feeding by the tube and intravenous feeding.

Answer-

The best possible way/ route for feeding the patient is orally or by mouth.

Tube feeding	Intravenous feeding
(i) Nutritionally, the entire food is fed through the tube. If the gastrointestinal tract is functioning, then the person digests and absorbs everything.	(i) Nutrition is provided to the patient by special solutions, which are delivered by drip into the vein.

(ii) This method is preferred over intravenous feeding. (Any other, any two)	(ii) If the person is unconscious or there is a problem with his/ her stomach, or it is not possible for him to chew or swallow. (Any other, any two)
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2. Pawan uses too much fat and sugar in his diet and does not take fibrous material at all. Educate him by showing the importance of good nutrition.

Answer-

Proper nutrition/ good nutrition/ adequate nutrition is important -

- to provide immunity.
- Provide immunity and protection from infection.
- For health benefits from various types of diseases.
- To deal with incurable diseases.

Excessive consumption of sugar and fat along with low or no fiber consumption and lack of physical activity can cause Pawan to suffer from diabetes soon.

It has been found in studies that eating more fruits, vegetables, whole grains, low fat dairy products and lard meat or pulses reduces the risk of heart disease. Therefore, good, and adequate nutrition is very important. (Any other)

3. Lata wants to adopt the career of a medical nutritionist and dietitian after class twelve. In this context, you should guide her how she can prepare herself?

Answer-

Preparation for Career as Medical Nutritionist or Dietician -

Essential Qualifications for Dietician-

- After passing 10 + 2 level, B.Sc. Home Science or B.Sc. Degree in Nutrition Science.
- Postgraduate Diploma in Dietetics with an internship in Dietetics, followed by a qualification as a Registered Dietitian (RD).

To choose a career in clinical nutrition and dietetics, Lata may pursue-

- i. B.Sc. in Home Science, Nutrition Science, Life Sciences, Biochemistry, Microbiology or Biotechnology. After taking the graduation degree in these field, she can further get admission in postgraduate diploma in dietetics. After completing university education, she can study further and get a certificate of eligibility for 'Registered Dietitian'.
 - ii. She can also do M.Sc. in Food Science and Nutrition or Dietetics to get more expertise in this field.
4. What do you understand by clinical nutrition? Explain the importance of clinical nutrition and dietary studies.

Answer-

Clinical Nutrition:

The special area of nutrition that is related to the disease. This area is also called medical nutrition therapy. Clinical nutrition focuses on nutritional management of patients.

Dietetics:

It is science, which explains how food and nutrition affect human health. It deals with feeding individuals based on the principles of nutrition.

Importance of clinical nutrition and dietetics-

- i. Clinical nutrition focuses on nutritional management of patients with certified disease.
- ii. In the circumstances of minor illness, acute and incurable disease, or chronic disease, it is important to ensure that the person is properly nourished, and for that the person who is providing services for this should be an expert and trained dietician/medical nutritionist/medical nutrition therapist.
- iii. New diseases such as HIV/AIDS have emerged and non-infectious diseases such as obesity, heart disease, extreme stress and diabetes are not only increasing in masses but are emerging at a young age.
- iv. Demographic changes have led to an increase in the number of elderly people. Thus, that segment of the population has grown,

which need help in nutritional care and dietary advice.

- v. New methods of nutritional assessment have been developed and are being adopted.
- vi. New technology, new methods and use of supplements and basic research related to nutrition, in addition to describing the role of various nutrients and other substances as a clinical nutritionist/ medical nutrition therapist can contribute significantly to disease management and promoting good health. (Any other)

Long Answer Questions (4 marks)

1. What is a Modified diet? List three major ways by which diet can be modified.

Answer-

Modified diets are those that are adjusted to meet the medical needs of a patient. For example, in kidney stones, allergic conditions include or remove certain foods, change in the number of meals, or modification in intervals of feeding and/or amount of food given or special plan for patients when route of feeding is altered. It can be one or more of the following-

- a. Change in consistency and/or texture (e.g., fluid, and soft diets).
- b. An increase or decrease in the energy (calorie) intake.
- c. Include greater or lesser amounts of one or more nutrients.
- a. Change in consistency and/or texture (e.g., fluid, and soft diets).

Depending on the circumstances, patients may be advised to take liquid, soft or regular diet/ solid foods.

- Liquid food- Fluids generally remain at room temperature. Its advantage is that if the gastrointestinal region is functioning normally then the nutrients are absorbed properly. Eating this type of diet is recommended for those who cannot chew or swallow normally. Examples of these types of foods are coconut water, fruit juices, soups, milk, buttermilk, milk shake, etc. But their limitation is that it is not easy to meet the nutritional needs of the person completely.

- Soft food- Provides soft but solid foods, which are cooked lightly. They do not contain high fibrous or gas-forming foods. These foods are easy to chew and digest. Examples of foods included in a soft diet are khichdi, oatmeal, etc. The risk of indigestion, flatulence, nausea, cramps, or any gastrointestinal problem is minimized by the foods given.
 - Mechanical soft diet- There are certain modifications we make even for normal adults in the older age group. This is called mechanical soft diet which includes soft, mashed, and pureed foods for the elderly with problems in chewing.
 - A soft diet, on the other hand, is a therapeutic modification. It is soft in consistency and includes only simple, easily digestible food with no harsh fibre, high fat or spicy foods.
- b. Decrease or increase in energy (calorie) intake.
 - Increase in energy (calorie) intake.
Examples: Diet given in case of fever
 - Reduction in energy (calorie) intake
Examples: Diet given in the stage of obesity
 - c. Incorporation of one or more nutrients in small or high amounts.
For example, increase in protein intake in case of surgery, lower protein intake in case of kidney failure, high or low in fibre, lower fat intake, restriction in sodium intake, restriction in fluid intake. (Any other)
2. Rakesh has been newly appointed as a dietician in a health club. To take proper health and nutritional care of the customers who come there, review what his role will be.

Answer-

Rakesh may consider the following factors for customers coming to the health club- **Refer Points to Remember Number 8**

Role of a dietician for customers of the health club

- a. Assessing the nutritional status of the customers of the health club.
- b. Analyzing nutritional requirements, providing advice.

- c. Helping them maintain their good nutritional status and stay healthy.
- d. To ensure that every customer gets proper diet and adequate nutrition as well as developing personalized nutritional care plan for each. (Any other)

Long Answer Questions (5 marks)

1. Mr. Mehta wants to consult a clinical nutritionist to reduce his risk of high blood pressure. In this context, you should tell him about the following-
 - a. What is Diet therapy?
 - b. What are the objectives of Diet therapy?
 - c. To get information related to his nutritional status and other nutritional requirements, how a clinical nutritionist would do his nutritional assessment?

Answer-

- a. Diet Therapy— **Refer to Points to Remember Number-6**
 - b. The objectives of Diet therapy— **Refer to Points to Remember Number-6**
 - c. Nutrition Assessment— **Refer to Points to Remember Number-7**
2. Reshma has been working on the post of Chief Dietician in a reputed hospital in the city for three years. In this context, explain briefly about the following:
 - a. As a successful professional dietician, which two important skills would Reshma be having?
 - b. What necessary educational qualifications will she have?
 - c. How does Study of clinical nutrition and dietetics enable medical nutrition professional?

Answer-

(A) As a successful professional dietician, Reshma will have the following two important skills -

- i. Assessing nutritional status of patients using clinical and biochemical parameters.
- ii. Preparation of customized diet plan as per the requirement of individual patients and specific disease conditions.
- iii. Communication skills for dietary counseling.
- iv. Knowledge of cultural environment, food prohibition.
- v. Skill in laboratory research and experimental design with patients to explore the utility of various diets, medicines, and nutritional supplements. (Any other, any two)

(B) Essential Qualifications for Dietician-

- i. After passing 10+2 level, B.Sc. Home Science or B.Sc. Degree in Nutrition Science, Life Sciences, Biochemistry, Microbiology or Biotechnology
- ii. B.Sc. Post Graduate Diploma in Dietetics
- iii. Qualification certificate as a Registered Dietitian (RD), with internship

(C) Study of clinical nutrition and dietetics enables the professionals to:

- i. Thoughtfully plan the diet for the nutritional needs of different levels of the life cycle,
- ii. Make changes in diet keeping in mind the physical condition, employment, ethnic and socio-economic background, treatment rules in various conditions of the disease and likes-dislikes of the patient,
- iii. Planning of food for the workers working in the industries, for the players and in specific circumstances like in space, for those working in submarines, for the people of defense services,
- iv. Promote the health and well-being of patients or outpatients admitted to hospitals as well as patients in institutional settings,
- v. Managing dietary services in a variety of institutions such as elderly homes, schools, orphanages, etc.
- vi. Helping patients with chronic diseases such as diabetes and cardiovascular disease to prevent complications and improve their quality of life,
- vii. Promote better capacity of holistic care services and contribute

to better living and health benefits in the form of better patient care management in better health and health care institutions in the community. (Any other, any two)

3. A medical study found that women who ate plenty of fruits, vegetables, whole grains, low-fat dairy products, and lard meat did live longer. Eating more fruits, vegetables and pulses reduces the risk of heart disease.

What would you conclude about the following?

- (A) Role of diet in causing disease
(B) Role of diet in prevention of diseases

Answer-

- (A) Role of diet in causing disease-

- i. Health and nutrition are intimately connected. Poor nutrition not only causes health problems but can make current problems worse, while proper diet and good nutrition can delay the onset and control of diseases. Foods that contain high fat and / or sugar or are made from highly refined foods or have low levels of fibrous and other important ingredients that are beneficial for health, are helpful in causing diseases.
- ii. For example, low consumption of foods containing omega-3 fatty acids in the diet may increase the risk of heart diseases such as fatal arrhythmias (abnormal heart rhythms) by up to 52%.(Any other)

(B) Role of diet in the prevention of diseases- Nutrition is necessary for the prevention and management of many disease conditions along with the protection and promotion of health.

For example, phytochemical / bioactive compounds are non-nutrient constituents present in foods that have functional or biological activity in the body and influence health. For example, antioxidants like beta-carotene, selenium, vitamin E and vitamin C, play a protective role in the body.(Any other)

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice questions

1. What is the main factor in the growth of chronic diseases in the population?
 - a. Doing more work on the computer
 - b. Activism on social media
 - c. Use of refined food in more quantity
 - d. High physical activity
2. What is the role of a dietician?
 - a. giving advice for diet
 - b. Surgery of the patient
 - c. Changes in diet as per patient's requirement
 - d. Both a) and c)
3. What kind of changes can be made to the modified diet?
 - a. Change in colour
 - b. Changes in the amount of nutrients
 - c. Changes in dietary decoration
 - d. Using refined substances in the diet
4. Filtered thin soups or juices (without pulp) are examples of _____ Diet.
 - a. Liquid
 - b. Clear Liquid
 - c. Normal
 - d. Soft

(B) Match the following

- | | |
|------------------------|---|
| A. Omega-3 fatty acids | i) Antioxidant |
| B. Cardiac Arrhythmias | ii) Scientific study of Disease emergence, distribution and control |
| C. Selenium | iii) Fish |
| D. Epidemiology | iv) Abnormal heart rhythm |

Pick the correct option -

- a) A - iii), B - iv), C - i), D - ii) b) A - iv), B - i), C - iii), D - ii)
c) A - ii), B - iv), C - i), D - iii) d) A - iv), B - iii), C - ii), D - i)

(C) Fill in the blanks

1. In the coming few years, India can become the_____capital of the world.
2. In case of kidney failure, the_____intake of protein is advised
3. It is now necessary to pass the National or State Eligibility Test conducted by_____ in eligibility for teaching posts of universities or colleges in food science and nutrition or dietetics or in other subjects as well.
4. _____foods are those products that are specially manufactured for persons with specific needs.
5. A_____diet is one that includes all groups of foods and meets the needs of healthy individuals.
6. A lightly cooked diet that does not contain harsh fiber, excess fat and spices or gas-forming foods and easy to digest is called a_____diet.

(D) Picture Based Questions-

1. Identify the picture and state that it comes under which category of special foods that have physiological or biological activity and influence health.



2. Identify the picture and state by which method the food is being given to the patient here?



(E) Very short answer question -

1. Describe any two ways of giving food to the patient.
2. Which two skills does an effective dietician need the most?
3. Write two examples of soft foods.
4. What does nutritional stress mean?
5. Give two reasons for increasing number of obesity and diabetes patients in India.
6. List two main roles of a clinical nutritionist.

Case Study Based Multiple Choice Questions (3 X 1 Mark)

The present era is full of opportunities. Not only are the students picking unconventional career options but there are plenty of sectors which are widening due to these choices. One such field which has gained momentum in recent years is building a career in Nutrition and Dietetics. The most attractive fact about Nutrition and Dietetics is that it runs parallel to both the medical and fitness sectors, which makes it quite promising and goal oriented. The program includes courses in nutrition, psychology, chemistry, and biology, thus making it an all-pervasive and holistic degree course. Many dietitians and nutritionists go for advanced degrees to specialize in a particular aspect of the subject.

1. Passing which of the following exam conducted by the University Grants Commission (UGC), is required to be eligible for teaching related posts?

- a. General Entrance Examination
 - b. CLAT
 - c. National or State Eligibility Test
 - d. Joint Entrance Examination (JEE)
2. The necessary qualification to become a dietician is -----.
- a. Internship in Food Science and Nutrition after 12th
 - b. Internship with Postgraduate Diploma
 - c. B.Sc. degree in Home Science
 - d. Ph.D. in Nutrition

Or

In disease, dieticians first serve the patient in nutrition care activities.

- a. Diagnosis of nutritional problems
 - b. Setting preference for nutritional interventions
 - c. Evaluation of nutritional care outcomes
 - d. Assessment of nutritional status
3. After gaining knowledge and skill of Psychology, Sociology, Education and Counselling Services with Dietetics, which position will an individual be eligible for?
- a. Food Researcher
 - b. Diet Consultant
 - c. Executive Chef
 - d. Laboratory Research Assistant

Or

The doctor prescribes dietary advice/orders in the medical records for a hospitalized patient and relies on the _____ to implement them.

- a. Staff of the hospital canteen
- b. Dietician
- c. Executive Chef
- d. Laboratory Research Assistant

Short Answer Questions (2 marks)

1. Educate Seema by giving four objectives of diet therapy so that she can improve the condition of her younger sister's anemia.

2. "Health and nutrition are intimately interrelated". Give two reasons in favour of this statement.
3. 'In the event of disease, nutritional care is a systematic set of activities' - Explain this statement through a flow-chart.
4. What does demographic changes mean? Illustrate by giving an example.
5. What are the various career avenues available in clinical nutrition and dietetics field?

Short Answer Questions (3 marks)

1. Kamala is a dietician at an old age home. What six factors should she consider when planning a diet for patients there?
2. Researchers and scientists have developed new methods and substances for gene expression, metabolic regulation and disease prevention and treatment. Name any three specific nutritional foods that are beneficial for health. Give two examples of each.
3. Abhay wants to focus his career on education and research in clinical nutrition and dietetics. For this, guide him by stating the necessary educational qualifications.
4. What do you understand by nutrition? Explain the difference between optimum nutrition and clinical nutrition.

Long Answer Questions (4 marks)

1. Sunita and Madan's family have left their native village and have been living in the city for the last seven years.
What would you conclude about the following?
 - a. What changes must have occurred in their diet while living in the city?
 - b. Briefly explain the role of diet in the emergence of health problems.
2. Review what knowledge and skills a professional clinical dietician or medical nutritionist must have.

3. What does liquid diet mean? What is the harm of giving this to a patient for a long time? Give four examples of liquid foods.

Long Answer Question- (5 marks)

1. Mr. Malik is a non-vegetarian. Due to his ill health, his clinical nutritionist has advised him to eat fish once a week. In this regard, explain the following:
 - a. The dietician would have given them such advice to reduce the risk of which disease?
 - b. Which ingredients are found in fish, which are beneficial for health?
 - c. Which two specific substances should be included in the diet for health benefits and which two foods should be reduced?
2. Mention five opportunities for career in the field of clinical nutrition and dietetics.
3. What do you understand by diet therapy? Why is nutritional assessment of the patient important? List the four steps of nutritional assessment.

-----O-----O-----O-----

3. PUBLIC NUTRITION AND HEALTH

‘POINTS TO REMEMBER’

1. Public Health - The concept of public health refers to the collective action taken by society to protect and promote the health of the whole population.

2. Reason to eradicate malnutrition-

We need to focus on public nutrition and health because of malnutrition.

- i. Almost 1/3rd of infants born in India are low birth weight babies. Low birth weight has adverse implications in adult life and may even lead to child mortality.
- ii. There is widespread prevalence of growth retardation among preschoolers from socio-economically disadvantaged families.
- iii. Children and adults suffers from micronutrient deficiencies.

3. Consequences of malnutrition-

If these problems are not controlled in time it will affect physical growth, mental and cognitive development. All of these can have negative impact on productivity and quality of life. If we tackle malnutrition India can grow economically and became a powerful nation.

4. Reasons of overnutrition in India-

- i. Large numbers of persons have altered their dietary patterns and lifestyles.
- ii. People have become more sedentary.
- iii. Relying on faster means of transportation.
- iv. Walk less.
- v. Do less amount of outdoor or physical activity.
- vi. Children do not play enough outdoor games.
- vii. Dietary patterns have also changed indulging in fast unhealthy foods like processed foods, fast foods, snacks, western type foods eg. burgers, pizzas.
- viii. Intake of whole grains, pulses, vegetables and fruits has reduced.

5. Effects of overnutrition-

- i. Obesity
- ii. Hypertension
- iii. Diabetes
- iv. Cancer
- v. Arthritis
- vi. Affect quality of life.
- vii. Adds financial burden.

6. Factors affecting nutritional problems-

- i. Poverty
- ii. Less access to toilets
- iii. Political will
- iv. Government policies
- v. Non availability of Health care facilities/services
- vi. Agricultural policy (production, price of various food stuff)
- vii. Economic factors (availability of financial resources)
- viii. Non availability of safe drinking water.
- ix. Poor sanitation.
- x. Food
- xi. Socio cultural factors.



Marasmus



Kwashiorkor



ANAEMIA
Anaemia



Night Blindness
NIGHT BLINDNESS



Goitre

7. Nutritional Problems in India-

- i. **Protein- Energy Malnutrition (PEM)**- It is caused by insufficient intake of the macronutrients (energy and protein). PEM can occur in children, elderly as well in some diseases eg. Tuberculosis, AIDS. It is assessed by evaluating the anthropometric measurements (weight, height, head chest circumference etc.)

Marasmus- Severe undernutrition due to deficiency of food and energy is termed as 'marasmus'.

Kwashiorkor- Severe undernutrition caused by protein deficiency is termed as 'kwashiorkor'.

- ii. **Iron - deficiency Anemia (IDA)** - Most common nutritional disorder in both developed and developing countries.

Vulnerable groups

- Women in child bearing age.
- Adolescent girls.
- Pregnant women.
- School age children.

IDA occurs when there is low level of hemoglobin in blood. Hemoglobin is required for carrying oxygen in the body.

Manifestations of IDA include-

- General Pallor.
- Paleness of conjunctiva of eyes.
- Paleness of tongue.
- Paleness of nail beds.
- Soft palate.
- Cognitive functions (attention span, memory, concentration) are affected.

iii. Vitamin A deficiency (VAD)

Vit A is necessary for-

- Maintenance of healthy epithelium
- Normal vision
- Growth
- Immunity

Deficiency of Vit A causes-

- Night blindness.
- Complete blindness if corrective measures are not taken.
- Less resistance to infection.
- Growth may be adversely affected.

iv. Iodine deficiency disorders (IDD) - Iodine is required for normal, mental and physical growth and development.

States where IDD is common

- Jammu and Kashmir to Arunachal Pradesh in the Himalayan belt
- Andhra Pradesh
- Karnataka
- Kerala
- Maharashtra
- Madhya Pradesh

Iodine Deficiency Disorder- This term refers to a spectrum of disabling conditions that affect the health of humans from fetal life through adulthood due to inadequate dietary intake of iodine.

- Deficiency of iodine results in insufficient amount of thyroid hormone which is synthesised by the thyroid gland.
- Enlarged thyroid known as 'goitre' is the most common manifestation of iodine deficiency.
- Iodine deficiency during pregnancy results in mental retardation and congenital abnormalities of the fetus.

8. Strategies/Intervention to tackle Nutritional Problems.

In 1993 Govt. of India adopted National Nutrition Policy (NNP) framed by the Department of Women and Child Development. NNP advocates comprehensive, integrated and intersectoral strategy for alleviating the multi-faceted problem of malnutrition and achieving the optimal state of health for the people: This involves two strategies-

(i) Direct short term interventions -

- Integrated child development services (ICDS) to cover all vulnerable

children in the age group of 0-6 years and all pregnant and lactating mothers.

- Fortification of essential foods (salt fortified with iodine)
- Production and popularisation of low cost nutritious food.
- Control of micronutrient deficiencies among children, pregnant women and nursing mothers by supplementing these nutrients, distributing free tablets etc.

(ii) **Long term strategies**

- Improving availability of food
- Improvement in dietary patterns by ensuring availability of nutritionally rich foods
- Poverty alleviation through
 - Employment generation schemes.
 - Public distribution system.
 - Implementing land reforms.
 - Improving health and family welfare.
 - Prevention of food adulteration.
 - Involvement of media, basic nutrition and knowledge.
 - Monitoring of nutrition programmes.
 - Improvement of status of women.
 - Education and literacy and community participation.

9. Two strategies to combat public nutrition problems

- i. Diet or food based strategies** - They are preventive and comprehensive strategies that use food as a tool to overcome nutritional deficiencies.

Advantages -

- It is sustainable and will have long - term benefits.
- They are cost effective.
- Can be adapted to different cultural and dietary traditions.
- They do not carry risk of overdose or toxicity.

Approaches -

- Dietary diversification and modification.
- Horticulture interventions eg. home gardening.

- Nutrition and health education.
- Food fortification.
- ii. Nutrient based or Medicinal Approach** - In this approach nutrient supplements are given to those who are at risk of deficiency and those who have deficiency.
- It is a short term strategy.
- Supplementation programmes are often expensive and problems of coverage is there.
- Key target groups are different for various nutrients.

10. Different Interventions for tackling Malnutrition.

i. Nutrient Supplementation -

- Prevention programmes for specific nutrient and specific target groups.
- Therapeutic treatment
- Timely
- Sustainability

Disadvantages -

- More costly than other measures.
- Narrow scope of coverage.

ii. Fortification (fortifying food with nutrients)

- Prevention for all
- Highly cost effective
- Wide coverage
- Sustainable

Disadvantages -

- Requires research.
- Requires participation of food industry.
- Does not lead to awareness in the population about the importance of nutrition and nutrients.
- Does not lead to long - term dietary/behavioural changes.

iii. Dietary Diversification

- Prevention (Universal/For all)
- Highly cost effective
- Wide coverage

- Sustainable
- Provides many micronutrients simultaneously.
- Improves food security.

Disadvantages -

- Requires changes in eating behaviour.
- Requires economic development to be feasible
- Requires change in agricultural policies.

11. Nutrition programmes Operating in India

i. ICDS- (Integrated Child Development Services) - It is an outreach programme for early childhood care and development.

ii. Nutrient Deficiency control programme -

- National Prophylaxis programme for prevention of blindness due to Vitamin A deficiency
- National Anemia control programme
- National Iodine deficiency disorder control programme.

iii. Food Supplementaton Programmes

- Mid - day meal programme.

iv. Food Security programmes

- Public Distribution System
- Antodaya Anna Yojana
- Annapurna Scheme
- National Food for work programme
- v. Self employment and wage employment schemes**

12. Health Care-

It is the responsibility of the government to provide adequate health care to the citizens as health is a fundamental human right.

- Health care is not just medical care but it includes a multitude of services that should help to promote, maintain, monitor or restore health.
- In India, health care is provided at three levels -
 - i. Primary Level-** This level is the first level of contact of the individual, family or community with the health system. These

services are provided through a network of primary health centres. (PHCs)

- ii. Secondary Level- More complex health problems are resolved at the second level through district hospitals and community health centres.
- iii. Tertiary Level- This level deals with more complex health problems. Institutions at tertiary level are medical college hospitals, regional hospitals, specialised hospitals and AIIMS.

13. Scope of Community nutritionist- A community nutritionist can work in the following areas -

- i. as part of outreach programmes undertaken by hospitals for prevention and promotion and education.
- ii. as part of ICDS, at different levels based on qualifications and expertise
- iii. at the government level as consultants, advisors or in policy making committees.
- iv. In all developmental programmes of government, voluntary organisations and international organisations like UNICEF, OXFAM, DFID, FAO, WHO, USAID, GAIN, Micronutrient Initiative, IFPRI and others.
- v. They can be involved with organisations who undertake large scale feeding programmes for various target groups such as young children, school children, adolescents, pregnant and lactating mothers, elderly, challenged individuals.
- vi. Nutritionists or school health counsellors in school health programmes.
- vii. There are avenues in teaching, research, entrepreneurship, industries with agencies involved in developing communication materials and educational packages.

14. List of Voluntary Organisations and international organisations related to Community Nutrition.

- i. UNICEF
- ii. OXFAM
- iii. DFID
- iv. FAO

- v. WHO
- vi. USAID
- vii. GAIN
- viii. Micronutrient Initiative
- ix. IFPRI

15. Public Health Nutrition-

Public Health Nutrition is the field of study that is concerned with promotion of good health through prevention of nutrition related problems and the government policies and programmes that are aimed at solving these problems.

16. Malnutrition-

Malnutrition occurs when a person is not taking the right amount of nutrients according to the requirement of the body.

17. Community-

Community is a specific group of people who share common characteristics example a common language, exposed to similar conditions, common lifestyle or the same health problem.

18. Underweight-

A person is said to be underweight when his/her body weight is less than adequate for his/her age.

19. Stunting (short stature)-

Stunting is said to be present when the height of a person is less than adequate for his age.

20. Wasting-

When weight of a person is not adequate relative to his height, it is termed wasting.

21. Hidden Hunger-

The term 'Hidden Hunger' is used to refer to micronutrient deficiency- iron, Vitamin- A, iodine, zinc.

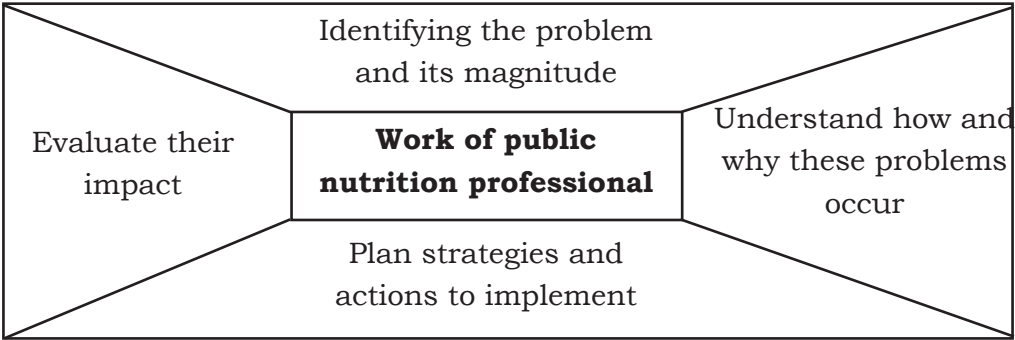
Full forms of Abbreviation

IDA - Iron Deficiency Anemia

VAD - Vitamin A Deficiency

IDD - Iodine deficiency disorder

ICDS - Integrated Child Development Services
MNREGA- Mahatma Gandhi National Rural Employment Guarantee Act 2005



OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple Choice Questions

1. Which one of these is a nutritional problem in India?
- | | |
|--------------------------------|------------|
| a. Protein Energy Malnutrition | b. Malaria |
| c. Tuberculosis | d. Cancer |

Ans. a) Protein Energy Malnutrition

2. The problem of overnutrition is due to
- | | |
|------------------------|----------------------------|
| a. Sedentary lifestyle | b. Faulty dietary patterns |
| c. exercise | d. Walking |
- a) (i) and (iii) b) (ii) and (iv)
c) (i) and (ii) d) (iii) and (iv)

Ans. c) Sedentary lifestyle and faulty dietary patterns

3. Which of the following is not a micronutrient?
- | | |
|------------|-----------|
| a. Protein | b. Zinc |
| c. Iron | d. Iodine |

Ans. a) Protein

4. Sunita has taken job of Public Nutritionist and has been assigned job to promote good nutrition. She will -
- | |
|---|
| a. Identify the problem of poor nutrition |
| b. Understand the reason and plan strategies |
| c. Not take actions and evaluate their impact |
| d. stay away from problem |
- a) (i) and (ii) b) (iii) and (iv)
c) (i) and (iii) d) (ii)

Ans. a) (i) and (ii) both

5. Name the condition that occurs when there is low level of hemoglobin in blood.
- | | |
|-----------|--------------------|
| a. Goitre | b. Anemia |
| c. Scurvy | d. Night blindness |

Ans. (ii) Anemia

(B) Match the following

A Iron	(i) Night blindness
B Vitamin A	(ii) Goitre
C Protein	(iii) Anemia
D Iodine	(iv) Kwashiorkor

Pick the correct option

- a. A(iii), B(i), C(iv), D(ii) A(iv), B(ii), C(i), D(iii)
b. A(ii), B(iii), C(iv), D(i) A(i), B(iv), C(iii), D(ii)

Ans. a) A(iii), B(i), C(iv), D(ii)

(C) Fill in the blanks-

1. In _____ approach nutrient supplements are given to those who have deficiency or who are at risk of deficiency.
2. In India, Health care is provided at _____, _____ and _____ level.
3. Iodised salt is example of _____
4. School going children are provided meals free of cost by government of India under _____ Scheme.

Ans. 1. Nutrient based 2. Primary, Secondary, Tertiary
3. Food fortification 5. Mid Day Meal

(D) Picture based question

1. Name the disease this picture represent and also name the nutrient whose deficiency cause this disease.



Ans. Marasmus. This is caused due to deficiency of protein

(E) Very Short Answer Questions

1. Name 2 types of protein - energy malnutrition.

Ans. Marasmus, Kwashiorkor

2. Name the policy adopted by government of India in 1993 to solve nutritional problems.

Ans. National Nutrition Policy (NNP)

3. Iodine deficiency during pregnancy has several adverse effects on fetus. What are they?

Ans. Iodine deficiency results in mental retardation and congenital abnormalities of the fetus.

4. Name 2 strategies to combat public nutrition problems.

Ans. 1. Diet or food based

2. Nutrient based.

Case Study based questions (1 mark X 4)

As our former Prime Minister Dr. Manmohan Singh stated in one of his speeches "The problem of malnutrition is a matter of national shame I appeal to the nation to resolve and work hard to eradicate malnutrition in 5 years". There is a need to adopt a multi - disciplinary approach to solve nutritional problems. Government is making considerable efforts to solve the problems.

1. Name of the policy adopted by Government of India to solve nutritional problems.
 - a. Primary Health Services
 - b. Secondary Health Services
 - c. Tertiary Health Services
 - d. National Nutrition Policy

Ans. (d) National Nutrition Policy

2. Name the strategies involved in National Nutrition Policy.
 - a. ICDS
 - b. Fortification
 - c. MNREGA
 - d. (a) and (b)

Ans. (d) ICDS and fortification

3. What are the consequences of undernutrition?

- a. Malnutrition
- b. Disability
- c. (a) and (b)
- d. Diabetes

Ans. (c) Malnutrition and Disability.

4. Which of the following statement is incorrect?

- a. National Nutrition policy was adopted in the year 1998.
- b. NNP was prepared by the Ministry of Women and Child Welfare
- c. NNP will help in reducing the problem of malnutrition.
- d. People can get good health through this policy.

Ans. (a) National Nutrition policy was adopted in the year 1998.

Short Answer Questions (2 Mark)

1. India is said to face " the double burden of malnutrition". Why?

Ans. India is facing the double burden of malnutrition because of coexistence of both undernutrition and overnutrition.

2. Write four ill effects of over nutrition problem.

- Ans. 1. Obesity**
- 2. High blood pressure**
- 3. Diabetes**
- 4. Financial burden**

3. Why Vitamin A is needed?

Ans. Vitamin A is needed for

- 1. Healthy epithelium**
- 2. Normal vision**
- 3. Growth**
- 4. Immunity**

4. Name the institutions at tertiary level of Health care in India.

Ans. 1. Medical college hospitals

- 2. Regional hospitals**
- 3. Specialised hospitals**
- 4. All India Institutes of Medical Sciences.**

Short Answer Questions (3 marks)

1. What the measures to reduce the poverty of rural and urban poor?

Ans. i. Employment generation schemes

ii. Public distribution system

iii. Implementing land reforms

iv. Improving health and family welfare

v. Prevention of food adulteration.

vi. Involvement of media, basic nutrition and knowledge

vii. Monitoring of nutrition programmes

viii. Improvement of status of women

ix. Education and literacy and community participation.

2. Write three benefits and three approaches of Diet or food based strategies.

Ans. Benefits-

a. They are cost effective.

b. They do not carry risk of overdose or toxicity.

c. They can be adapted to different cultural and dietary traditions.

Approaches-

a. Dietary diversification and modification.

b. Horticulture interventions eg. home gardening.

3. Name various Nutrient Deficiency control programmes.

Ans. 1. National Prophylaxis programme for prevention of blindness due to Vitamin A deficiency.

2. National Anemia Control Programme.

3. National Iodine Deficiency disorder control programme.

Long Answer Questions (4 Marks)

1. Write Symptoms of Anemia.

Ans. i. General pallor

ii. Paleness of conjunctiva of eyes

iii. Yellowish tongue

iv. Paleness of nail beds

v. Soft palate

vi. Low attention span

vii. Memory is affected

viii. Concentration is affected

2. Write difference between primary and secondary level of Health Care System in India

Ans. Primary Level- This level is the first level of contact of the individual, family or community with the health system. These services are provided through a network of primary health centres (PHCs)

Secondary Level- This level is the second level where more complex health problems are resolved. These services are provided through district hospitals and community health centres.

3. List various food security programmes of India. Also write 4 other nutrition programmes operating in India.

Ans. Food Security Programmes

- Public Distribution System
- Antodaya Anna Yojana
- Annapurna Scheme
- National Food for work programme.

Other Nutrition Programmes

- Integrated Child development Services
- Nutrient Deficiency Control Programme
- Food Supplementation programmes

- Self employment and wage employment schemes

Long Answer Questions (5 Marks)

1. Briefly describe the strategies adopted by National Nutrition Policy (NNP)

Ans. In 1993, Government of India adopted National Nutrition Policy (NNP) framed by the Department of Women and Child development. NNP advocates "comprehensive, integrated and intersectoral strategy for alleviating the multi-faceted problem of malnutrition and achieving the optimal state of health for the people.

Strategies of NNP-

A. Short term strategies-

- i. Integrated Child development services.
- ii. Fortification of essential foods.
- iii. Production and popularisation of low cost nutrition food.
- iv. Control of micronutrient deficiencies among children, pregnant women and nursing mothers by supplementing these nutrients, distributing free tablets etc.

B. Long term strategies-

- i. Improving availability of food.
 - ii. Improvement in dietary patterns by ensuring availability of nutritionally rich foods.
 - iii. Poverty alleviation.
2. Name the areas where a community nutritionist can work.

Ans. Refer to Points to Remember Number 13.

3. What are the responsive factors of poor nutrition or under nutrition?

Ans. (i) Immediate causes at individual level -

- a. Inadequate faulty dietary intake
- b. Disease

(ii) Underlying causes at Household/Family level

- a. Insufficient access to food.
- b. Inadequate maternal and child care practices
- c. Poor water/sanitation and hygiene

- d. Inadequate health services and insufficient access to health services.
- e. Inadequate and/or inappropriate knowledge and discrimination against women, elderly and girl child.
- f. Inadequate education.

(iii) Basic Causes-

- a. Quantity and quality of actual resources e.g human resources, financial and organisational (existence of services and the way they are operated and controlled).
- b. Political, cultural, religious, economic and social systems. This includes status of women, allocation of funds for programmes to solve the problems, environmental degradation and biodiversity.
- c. Potential resources, environment, technology and people.

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple Choice Questions

1. If the problem of malnutrition is not controlled in time, it will affect-
 - a. Physical growth
 - b. Mental development
 - c. (a) and (b)
 - d. Spiritual development
2. A specific group of people who share common characteristics eg a common language, exposed to similar conditions, common lifestyle or the same health problem.
 - a. Society
 - b. Community
 - c. (a) and (b)
 - d. Adolescent
3. What are the reasons of overnutrition in India?
 - a. People started working more
 - b. Children do not play outdoors
 - c. People have started eating burger, pizzas
 - d. Exercise

- a. (i) and (ii) b. (iii) and (iv)
 - c. (i) and (iii) d. (ii) and (iv)
4. What would you call a person if his body weight is less than adequate for his age?
- a. Underweight b. Stunting
 - c. Wasting d. Overweight

(B) match the following

- | | |
|------------------------|--------------------------|
| A. High blood pressure | (i) Long term strategy |
| B. Marasmus | (ii) over nutrition |
| C. ICDS | (iii) under nutrition |
| D. Food safety | (iv) short term strategy |

Pick the correct option

- a. A(ii), B(iii), C(iv), D(i) b. A(i), B(ii), C(iv), D(iii)
- c. A(iii), B(i), C(iv), D(ii) d. A(iv), B(iii), C(ii), D(i)

(C) Fill in the blanks

- In India health services at primary level are provided through _____.
- More complex health problems are resolved at the second level through _____ and _____.
- The concept of _____ refers to the collective action taken by society to protect and promote the health of the whole population.
- Night blindness is caused by deficiency of _____.

(D) Picture based question

- Name the disease shown in the picture. Also name the nutrient whose deficiency causes this problem.



(E) Very short answer question

1. Name the field of study that is concerned with promotion of good health through prevention of nutrition related problems and the government policies and programmes that are aimed at solving these problems.
2. Which term is used to refer to micronutrient deficiency?
3. Name the nutrient found in excess in processed food, fried foods, snacks, western type food like burger. Also name the nutrient which is lacking in these food stuff.
4. Name the disease caused by deficiency of protein.

Case Study based questions (1 mark X 3)

IDD is an ecological phenomenon, largely due to deficiency of iodine in the soil. Some of the states in India where IDD is common are - Jammu and Kashmir to Arunachal Pradesh in the Himalayan belt, Andhra Pradesh, Karnataka, Kerala, Maharashtra and Madhya Pradesh. The term 'Iodine Deficiency Disorders' refers to a spectrum of disabling conditions that affect the health of humans from fetal life through adulthood due to inadequate dietary intake of Iodine.

1. Which hormone is produced in insufficient quantity due to iodine deficiency?
 - a. Thyroxine
 - b. Metatonin
 - c. Dopamine
 - d. Prolactin
2. Deficiency of iodine causes _____.
 - a. Anemia
 - b. Goitre
 - c. Night blindness
 - d. Marasmus

Or

Thyroxine is synthesised by _____ gland.

- a. Pineal gland
 - b. Thyroid gland
 - c. Prostate gland
 - d. Thymus gland
3. Mental retardation and congenital abnormalities of the fetus are

caused due to iodine deficiency during _____

- a. Pregnancy b. Infancy
- c. Childhood d. Adolescence.

Or

Government has started _____ programme to prevent goitre.

- a. Dietary Supplement Programme
- b. National Iodine deficiency disorder Control programme
- c. National Anemia Control Programme
- d. National Disease Prevention Programme.

Short Answer Questions (2 Marks)

1. What is the difference between stunting and wasting?
2. What do you understand by Integrated Child development services.
3. What harm can the nation suffer from malnutrition?
4. How do public health nutrition differs from clinical nutrition?

Short Answer Questions (3 Marks)

1. What is the work of Public Nutrition Professional in the area of Public Health?
2. State the difference between Diet/food based strategies and Nutrient based strategies.

Long Answer Questions (4 Marks)

1. List Nutrition Programmes Operating in India.
2. Explain all the levels of health care which is provided in India.

Long Answer Questions (5 marks)

1. Write about Nutritional problems in India.
2. What is the scope of a community nutritionist?

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4. CATERING AND FOOD SERVICE MANAGEMENT

‘POINTS TO REMEMBER’

1. **Services that cater/ provide food service are also known as Catering services.**
2. **In ancient times in India, dharamshalas provided food to travellers who went on pilgrimages. Today also there are dharamshalas in many holy places. It offers place for stay and meals at low cost. Dharamshalas are made by those people who have expertise to run them. Many dharamshalas offer free prasad or langar to people who have come to religious places.**
3. **Food service and catering has evolved into an industry because-**
 - i. There is much demand for food which is tasty, hygienic, healthy. It should be served aesthetically too.
 - ii. There is a demand for food with longer shelf life.
 - iii. Due to scientific and technological advancement, activities related to food production have become simple. These activities improve the safety and quality of food, and make work simple and less tiring.
 - iv. Use of computers has helped in maintaining records, accounting systems but also for online ordering of food, information about equipments manufactured in different parts of the world and recipes for various preparations.
4. **Factors influencing development of food services-**
 - i. Urbanisation and Globalisation
 - ii. Tradition and Culture
 - iii. Religious practices
 - iv. Industrial development
 - v. Social and economic changes
 - vi. Technological development
5. **Significance of Catering and Food Service Management -**
 - i. Urbanisation and Globalisation- People and students live alone in cities for their livelihood and education respectively, and need food services.
 - ii. International visits and Tourism- Many people travel abroad,

hence they need food services over there.

- iii. Knowledge of various cuisines and advertisements- People get information about different cuisines from advertisements and media. They like to eat new types of foods.
- iv. Local people have interest in new food/ foods of different states- People like to eat foods of different states, countries; hence catering and food service management has been increased.

6. 'Cuisinology' has become an area of interest and provided new professional avenues because India has various cultures and each region has its own food. Several types of dishes are made from Kashmir in North to Kerala in South, Odisha and West Bengal in East to Gujarat and Maharashtra in West.

There are many cuisines across the world like- British, Welsh, Irish, Scottish, French, Italian, Spanish, German, Austrian, Russian, Eastern European, Swiss, Scandinavian, Mediterranean, Middle Eastern, American, Mexican, Caribbean, African. If we talk about Asia and South Asia, there are several cuisines besides Indian like- Pakistani, Bangladeshi, Thai, Chinese, Korean, Japanese, Indonesian. In each of these cuisines, the ingredients used and the methods of preparation are different.

7. Catering can be regarded as a service that provides a pleasant change from home cooked food.

Different institutes where catering services are given - Hospital, old age homes, orphanages, hostels, schools/college/offices, prisons, feeding programmes undertaken by the government or voluntary sector to improve the health and nutrition of specific groups.

8. Home based food service-

There are individuals or groups who prepare food and send them to persons at their places of work or to their homes. This is known as home based food service. These services are mainly given by women entrepreneurs.

9. Reasons for increase in demand of readymade foods-

- i. When both husband and wife are working, due to long working hours they cannot cook food at home.
- ii. Many people/ children live away from their families due to

INDIAN CUISINES

KASHMIR-Rogan Josh



TAMIL NADU-Idli



KERALA-Dosa



ODISHA-Chhena Poda



WEST BENGAL-Rasgullah



GUJARAT-Dhokla



MAHARASHTRA-Pav Bhaji



PUNJAB-Makki Ki Roti, Saag



their job/ higher education. Hence it is difficult for them to cook food on their own.

- iii. Community activities such as fairs, exhibitions, rally, meetings etc. have demand for such foods.

10. Food service industry-

It means those places, institutions and companies that are responsible for any meal preparation outside the home. These vary from expensive hotels and restaurants to less expensive outlets such as fast food outlets, food services in canteens/ cafeterias in school, colleges, universities, industries, offices etc.

11. Food service management-

It is the art of providing food and beverages aesthetically and scientifically to a large number of people, in a satisfactory and cost effective way. Food service industry may also be referred to as Catering industry.

12. Food service-

It is the practice or business of making, transporting and serving prepared foods. The purpose of food service is to supply palatable food prepared under acceptable standards of sanitation, aesthetically served at allotted cost.

13. Food service manager-

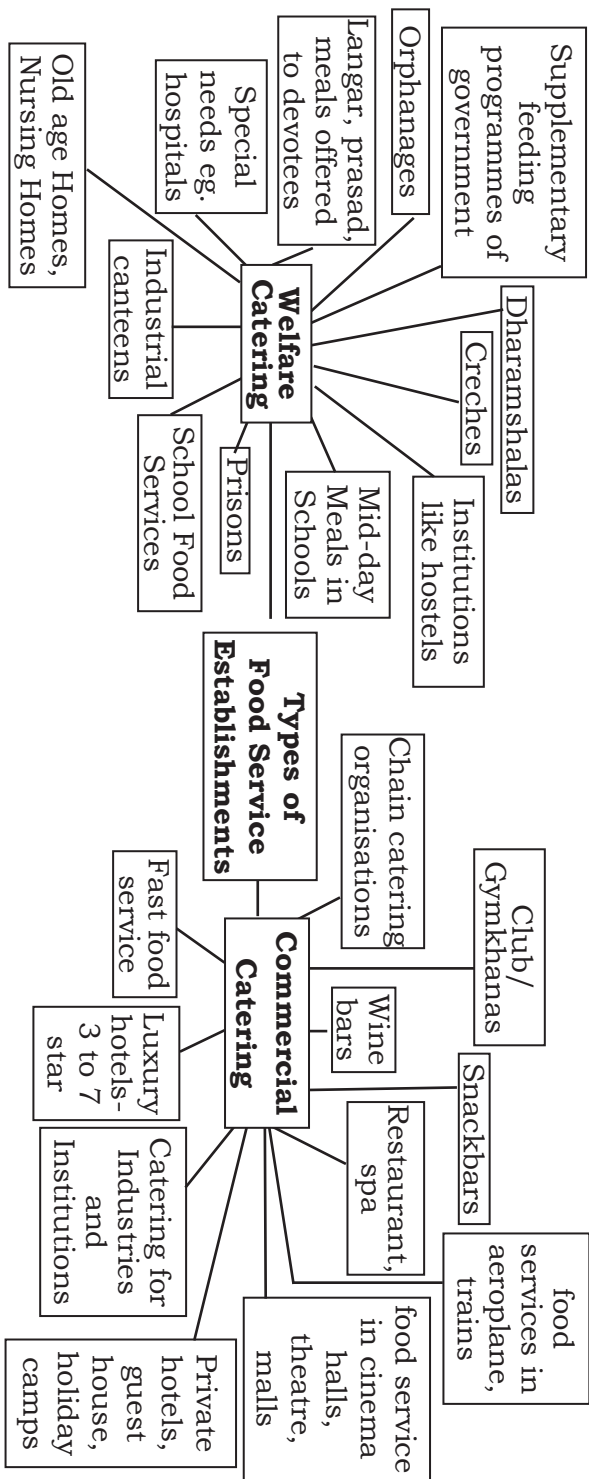
He is one who assumes responsibility for the management and administration of a food service unit / department / organisation.

14. Menu compiling-

It is one by which all activities in the food service unit are influenced. The menu determines the ingredients required, the type and number of equipment, the expertise of the personnel and the number to be employed. Menu compiling is the most important job in catering.

15. Catering services-

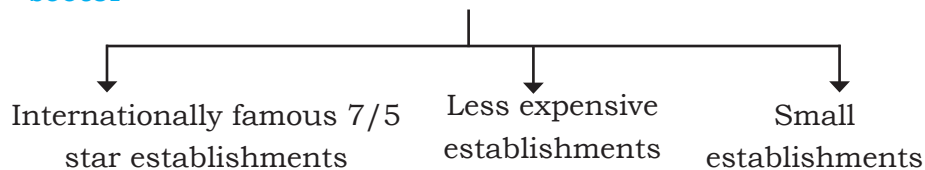
- i. Welfare or Non Commercial
- ii. Hotels and Commercial Catering
- i. Welfare or Non commercial services- The main objective of these organisations is not to make profit. These organisations do social welfare work, offer free food to people, example- at workplaces, armed forces, in schools, in supplementary feeding programmes implemented by the government, for sick



people in hospitals. Many industries provide free food to their employees or provide food at very low price. Caterers/ managers of these services may be given limited budgets within which they are required to successfully manage the operations. In such establishments, the service is not available to the public, but only to the members of the institution/ organisation for which the service is operated.

- ii. Commercial Services- The main objective of these organisations is to make profit. Such services are open to the public for use. They sell food and beverages, example- hotel, restaurant, fast food service, snack bars etc. They are the major contributors of foreign exchange in the country because tourism industry brings money into the country in exchange of its services.

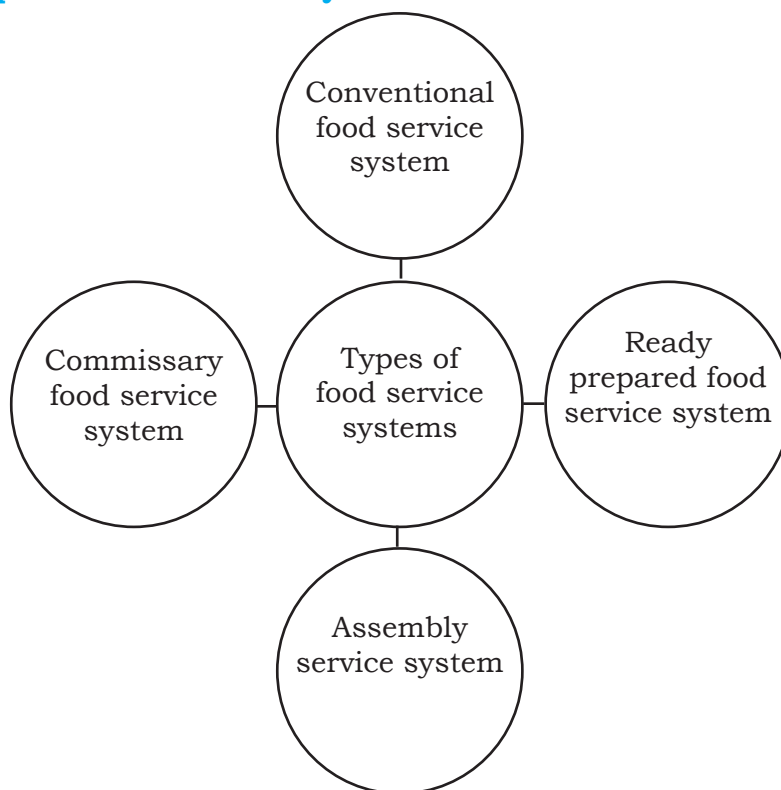
16. Styles and standards of functions in catering by the commercial sector-



- i. Internationally famous 7/5 star establishments- These are big hotels which are elegant and luxurious. Here, the facilities and food is of the highest standard. The banquet manager has at his disposal all the resources and equipment he needs. These establishments provide excellent services and their maintenance is very expensive, hence their prices are very high.
- ii. Less expensive establishments- They have a pleasant and cheerful ambience, food and services are of a high standard. Their costs and prices are less than that of big hotels. eg. 3 or 4 star hotel, restaurant etc.
- iii. Small restaurants- Here much attention is not paid to ambience, they use minimum number of equipments and food

is relatively cheaper. Menu in restaurant is limited, there is not too much variety.

17. Types of Food Service Systems



- i. Conventional food service system- In this, food is prepared in a kitchen on the premises where the food is to be served. After food preparation, it is immediately served too. The food may be distributed in cafeterias, restaurants, dining halls of hostels. In hospitals, patients are served food in trays. In this system, seasonal ingredients are used, menu planning is flexible and distribution costs are low.
- ii. Commissary food service system- In this system, food is prepared centrally at one place, but it is distributed to several remote areas for final preparation and service. It is necessary for the food distributor to ensure that the food is supplied to

various outlets. for example- chains of outlets (Cafe Coffee Day, Barista, Domino etc). Here basic food items like icecream, milk, cookies etc. are supplied from a centralised kitchen. Final step of cooking is done there only. Due to some basic food product, uniformity of quality of products for all units can be assured and it is cost effective.

- iii. Ready- prepared food service system- In this system, food items are prepared well in advance before the time of service and kept frozen until they are to be used. example- paranthas, samosas, cutlets, french fries etc. Godrej and Mafco are examples of these industries. Special equipment is required for freezing the food and separate freezers for storing the food in frozen condition. They should be very carefully stored.
- iv. Assembly service system- In this system, fully prepared foods are purchased from manufacturers and only finishing processes such as seasoning, thawing, reheating is done at the place of service. These operationxs require minimal cooking at the point of service example- panipuri, bhelpuri etc. The manufacturing process is separated from the distribution process. In this, number of items prepared are in less quantity.

18. Qualities that a food service manager/ caterer should have-

- i. Knowledge of menu planning, food selection, preparation and service, equipment required.
- ii. Organisational and managerial skills.
- iii. Ensure that sanitation and hygiene are optimal.
- iv. Have an adequate system of cost control.
- v. Wisely utilize space for the physical layout of the unit.
- vi. Ensure appropriate waste management practices and procedures are used.
- vii. The entire operation should be environment friendly to the extent possible.

19. Menu is a means of communication by which the caterer/ food service unit , whatever type may be, informs the customer/ consumer what food items are being offered.

Points to be considered while planning a menu-

- i. Climate
- ii. Season
- iii. Availability of ingredients
- iv. Price range
- v. Time of day
- vi. Occasion of eating
- vii. Variety in colour, flavour etc.
- viii. Nutritional considerations
- ix. Food habits
- x. Menu Pattern
- xi. Sequence of courses.

Functions of a menu-

- i. Inform the customer/ consumer about what is available.
- ii. Inform the catering staff about what is to be prepared.

Three points of view about Menu planning -

- i. The customer gets value for money in terms of the quantity of food served, variety and the palatability as well as the way the food is served.
- ii. The employees who have to translate the written menu into the actual food products.
- iii. The management who gets satisfaction in terms of profit, good reputation, satisfied customers who will come back to the establishment. The menu creates an image which also reflects the overall style of the restaurant. Attractive well designed menus help to promote sales and can be a means

of advertising.

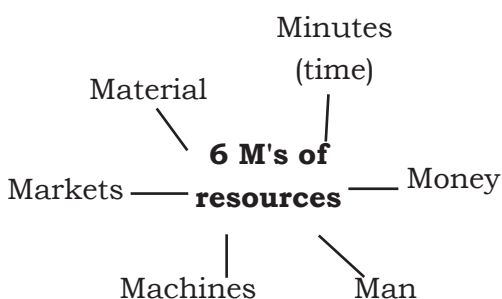
Advantages of Menu Planning -

- i. Is labour saving
- ii. Is time saving.
- iii. Is cost effective

20. Management in food service-

Management is a process of using resources to achieve goals through various interacting elements. The manager plans, organises, motivates, directs and controls. A good manager adds foresight, order, purpose, integration and effectiveness to the contribution

of others so that goals can be achieved. We can also define management as a process of decision making and control over the action of human beings for the purpose of attaining predetermined goals. This includes management of human and non human or material resources.

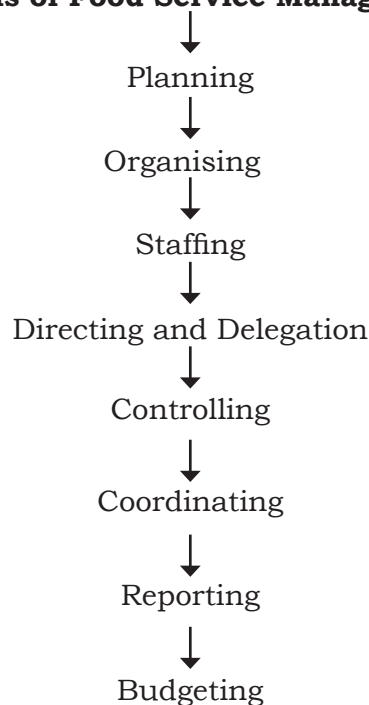


21. Functions of Food Service Management

- i. Planning - Planning means to think in advance, determine clear objectives and policies. and select an appropriate action in order to accomplish the goals. Planning is a basic and crucial function. All other functions are dependent on planning. Here it is decided which work to be delegated to which staff member. Planning is short term or long term. Here, day to day planning of activities is done. In planning we take decisions on various questions like What to do? When to do? Why to do? How to do? Who will do it?
- ii. Organising- Organising serves as a link between various other functions of management. In this different tasks of the organisation are identified and work is divided among various

workers. Workers of one particular skill and ability are grouped together.

Functions of Food Service Management



- iii. Staffing- This function involves employing and training manpower and their maintenance. It is important to hire persons with the required knowledge and skills so that goals can be achieved.
- iv. Directing and Delegation- Directing requires the skills and ability for making decisions quickly. Delegation involves distribution of workloads to appropriately qualified individuals at various levels within the organisation. In Direction, interests of both the workers and the organisation should be looked after.
- v. Controlling - In controlling it is seen that the performance is in accordance with the plans. This also includes cost control,

which is very essential for financial operations. All items of income and expenses are to be monitored and controlled. Keeping records is essential for controlling

- vi. Coordinating- This function helps in interlinking and interconnecting various types of activities for smooth running of the organisation and achieving its objectives.
- vii. Reporting- Different authorities of a department eg. Managers, Executives are informed about the various tasks. They are informed through reports, papers and records. This is very important for smooth functioning of the organisation.
- viii. Budgeting- It is very important for all organisations to prepare a budget because all activities are planned and undertaken keeping in mind the finance available.

22. Skills essential in the Food service industry -

- i. Should have interest in food. Regular update of trends in national and international cuisines should be there.
- ii. Should have the ability to have a good focus on quality, production, sanitation and food cost controls
- iii. Should have the ability to establish, maintain and enforce consistently high performance standards.
- iv. Should be friendly and outgoing person.
- v. Good communication skills, both verbally and in writing, with interaction skills should be there
- vi. Should have good organising abilities.
- vii. Person himself should be pleasant, cheerful and energetic.
- viii. Should know multi-languages.
- ix. Should have the ability to be on his feet for long hours.

23. Advantages of doing work in a 7 - star establishment-

- i. It has a luxurious atmosphere. Person working there comes into contact with famous and important people of many nationalities.
- ii. It is an international industry hence it provides opportunities

- for trained persons to be able to work abroad for some or throughout their careers.
- iii. Well trained experienced professionals are appointed who can participate in opening hotels and other catering establishments in different countries.
- iv. It gives opportunity to professionals to work in beautiful locations.

24. Careers in the Catering and Food Service Industry -

- i. Food Service Supervisor
- ii. Cafeteria Manager, Catering Manager, Production Manager, Purchase Manager
- iii. Food Service Director/ Assistant Food Service Director
- iv. Catering services in independent restaurants, corporate restaurants, franchised restaurants, managed services in educational institutions, health care industry like hospitals, industrial canteens, travel related transport systems such as air, trains, cruise jobs.
- v. Executive Chef, Sous chef, Chef Tournant, Station Chef.
- vi. Set up independent own restaurant, Corporate restaurants, franchised restaurants.
- vii. Can undertake managed services for education, healthcare, business and industry.
- viii. Catering in amusement parks, catering in national, state and regional parks, catering for adventure/ eco-tourism
- ix. Catering for theme parties, product launches banquets, official functions
- x. Supplying special, nutritionally modified meals/ health foods.
- xi. Display in media
- xii. Own entrepreneurial ventures
- xiii. Specialist in Cuisinology
- xiv. Writing in magazines, newspapers and media shows.
- xv. Consultancy

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple Choice Questions

1. _____ is the art of providing food and beverage aesthetically and scientifically to a large number of people.
- a. Food service management
 - b. Food service
 - c. Food service industry
 - d. Food service manager.

Ans. a) Food service management.

2. Your brother wants to set up his food service organisation. Which of the following factors he should keep in mind?
- a. Culture and religion
 - b. Urbanisation and Globalisation
 - c. Market
 - d. Both a) and b).

3. Which of the following is a welfare catering service ?
- a. Catering services in aeroplane
 - b. Orphanage
 - c. Snackbar
 - d. Restaurant

Ans. b) Orphanage

4. Which of the following is not a type of food service system ?
- a. Conventional food service system
 - b. Ready prepared food service system
 - c. Commissary food service system
 - d. Assembly service system

Ans. c) Commissary food service system

5. Which of the following is not a career option in Catering and Food service industry?
- a. Food Service Supervisor
 - b. Executive Chef
 - c. Catering in functions
 - d. Dietician

Ans. (d) Dietician

(B) Match the following

- | | |
|---|-------------------|
| A. Internationally famous establishment | i) Barista |
| B. Small restaurant | (ii) 3 star hotel |

- C. Less expensive establishment
- D. Chain of restaurants

- (iii) Less equipments
- (iv) 7 star hotel

Pick the correct option-

- a) Aii, Bi, Civ, Diii
- b) Aiv, Biii, Cii, Di
- c) Ai, Bii, Ciii, Div
- d) Aiii, Bi, Civ, Dii

Ans. b) Aiv, Biii, Cii, Di

(C) Fill in the blanks -

1. In ancient times, travellers used to have meals in _____.
2. _____ has become an area of interest because India has various cultures and each region has its own food.
3. _____ mean those places, institutions and companies which are responsible for any meal preparation outside the home.
4. _____ is the practice or business of making transporting and serving prepared foods.
5. _____ is one of the most important jobs in catering.

Answers-

1. Dharamshalas

2. Cuisinology

3. Food service industry

4. Food service

5. Menu compiling

D) Picture based Question

Identify the picture and name the Indian state to which this cuisine belongs to?



Ans. Punjab

E) Very Short Answer Questions

1. What are Catering services?

Ans. Services that cater/ provide food service are known as catering services.

2. Name two institutions which offer catering services.

Ans. Hospital, Orphanage

3. Kishore works in an MNC. He eats readymade food. What are the two reasons for increasing demand of ready to eat foods?

Ans. Demand for readymade foods is increasing due to-

- a. Many people live away from their families due to their higher education or job. They have difficulty in preparing food on their own, hence they eat readymade foods.
- b. When both husband and wife are working and due to long working hours, they cannot cook food at home.

4. What do you understand by Menu compiling?

Ans. Menu determines the ingredients required, the type and number of equipment, the expertise of the personnel and the number to be employed.

Case Study Based Question (1 mark X 4)

In ancient times in India, dharamshalas catered to travellers who went on pilgrimages. Even today, the dharamshalas are in operation, offering a cheap place to stay and meals for sustenance. Besides this, at religious places it is traditional to give prasad or langar to the devotees. With changes in the socio-economic scenario, food service and catering has evolved into an industry that is expanding, as there is much greater demand for food which is not only tasty but also very hygienic, healthy and aesthetically served.

1. Which of the following is not a commercial catering service?

- | | |
|---------------|---------------------|
| a. Hotel | b. Hostel |
| c. Restaurant | d. Fastfood service |

Ans. b. Hostel

2. Sudhir is going out to travel with his family. He needs a place which has a pleasant ambience, which provides high standard food but is not very expensive. What suggestion you will give him?
- a. 7 star hotel b. Dharamshala
 - c. 5 star hotel d. 3 star hotel

Ans. d. 3 star hotel

3. Which of the following is not an advantage of preparing menu?
- a. Saves labour b. Saves fuel
 - c. Saves time d. Is cost effective

Ans. b. Saves fuel

4. Which of the following is incorrect statement?
- a. That food is in demand which does not spoil easily.
 - b. It has become difficult to keep records with the help of computers.
 - c. It is easy to give online orders.
 - d. India has various cuisines.

Ans. b. It has become difficult to keep records with the help of computers.

Short Answer Questions (2 marks)

1. 'Food service and catering has evolved into an industry.' Discuss this statement.

Ans. Food service and catering has evolved into an industry because -

- i. There is a big demand for tasty, hygienic and healthy food. It should also be aesthetically served.
- ii. Such food is in demand which does not get spoil soon.
- iii. Due to scientific and technological advancement activities related to food production have become simpler. These activities improve the safety and quality of food and make the work more simple and easy.

- iv. Use of computers has helped to maintain records, accounting systems, online ordering of food, information about equipments manufactured in different parts of the world and recipes for various preparations are easily available.

2. Write four factors which influence development of food services.

Ans. i. Urbanisation and Globalisation

ii. Tradition and Culture

iii. Religious practices

iv. Industrial development

3. What is the difference between Home-based food service and Food service industry, explain?

Ans. When some individuals (like entrepreneurial women) or groups prepare food and send them to persons at their places of work or to their homes, it is called Home-based food service. Those places, institutions and companies that are responsible for any meal preparation outside the home are called Food service industry. They can be many types of establishments like hotel, restaurant, fast food outlets, canteen or cafeteria.

4. Prerit has got a job in a '7 star' hotel. What benefits Prerit will get from this job?

Ans. Benefits of doing job in a '7-star' hotel-

- i. It has a luxurious atmosphere. If he works there, he will come in contact with many famous and important people.
- ii. It is an international industry, hence he will get opportunity to work abroad.
- iii. When he gets well trained and experienced, he may be appointed in opening hotels and other catering establishments in different countries.
- iv. It will give him opportunity to work in beautiful locations.

Short Answer Questions (3 marks)

1. A group of college going boys and girls want to go for educational

tour. What could be the styles and standards of functions in staying and catering by the commercial sector, explain.

Ans. Styles and standards of functions in catering -

- i. Internationally famous 7/5 star establishments- They are big hotels that are elegant and luxurious. Here, the facilities and food are of highest standards but they are very expensive.
 - ii. Less expensive establishments- They have a pleasant and cheerful ambience, food and all services are of high standard. Their costs are less than big hotels, like- 3 or 4- star hotels.
 - iii. Small restaurants- Here not much attention is paid to ambience, less equipments are used. Here food is relatively cheaper. Restaurants menu does not have much variation.
2. Ramesh has opened a new restaurant. Which six points should he keep in mind while preparing the menu for his restaurant?

Ans. Points to be kept in mind while preparing menu -

- i. Season
 - ii. Availability of ingredients
 - iii. Price range
 - iv. Variety
 - v. Time of day
 - vi. Food habits of customers over there.
3. What is management in food service? What are the 6 M's of resources?

Ans. Management is a process of using resources to achieve goals through various interacting elements.

6 M's of resources are-

- i. MONEY
- ii. MATERIAL
- iii. MAN
- iv. MACHINES
- v. MINUTES
- vi. MARKETS

Long Answer Questions (4 marks)

1. Catering services are of how many types? Explain by giving examples.

Ans. Refer to Points to Remember Number-15

2. Nikhil wants to become a Food Service Manager. Which qualities should he have for this career?

Ans. Refer to Points to Remember Number-18

3. Ram has to open his own small restaurant. Motivate him to prepare an appropriate menu by telling him two functions, three advantages and three points of view about menu planning.

Ans. Functions of a menu -

- i. Inform the customer/ consumer about what is available.
- ii. Inform the catering staff about what is to be prepared.

Advantages of Menu planning -

- i. Is labour saving
- ii. Is time saving
- iii. Is cost effective

Three points of view about Menu planning -

- i. The customer gets value for money in terms of the quantity of food served, variety and the palatability as well as the way the food is served.
 - ii. The employees who have to translate the written menu into the actual food products.
 - iii. The management who gets satisfaction in terms of profit, good reputation, satisfied customers who will come back to the establishment. The menu creates an image which also reflects the overall style of the restaurant. Attractive well designed menus help to promote sales and can be a means of advertising.
4. Seema wants to work in Food service industry. Inform her the necessary skills required in this field.

Ans. Refer to Points to Remember Number-22

- i. Good communication skills, both verbally and in writing, with interaction skills should be there
- ii. Should have good organising abilities.

- iii. Person himself should be pleasant, cheerful and energetic.
- iv. Should know multi languages
- v. Should have the ability to be on his feet for long hours.

Long Answer Questions (5 marks)

1. Food service systems are of how many types? Briefly explain each of them.

Ans. Food service systems are of four types. They are as follows-

- i. Conventional food service system - In this, food is prepared in a kitchen on the premises where the food is to be served. After food preparation, it is immediately served too like in restaurant, hostel, hospital.
 - ii. Commissary food service system - In this system, food is prepared centrally at one place, but it is distributed to several remote areas of final preparation and service. like - chains of restaurants (Cafe Coffee Day, Barista).
 - iii. Ready - prepared food service system - In this system, food items are prepared well in advance before the time of service and kept frozen till they are to be used so that they do not spoil. like - paranthas, samosas, cutlets, french fries etc.
 - iv. Assembly - service system - In this system, fully prepared foods are purchased from manufacturers and only finishing processes such as seasoning, thawing, reheating is done at the place of service. These operations require minimal cooking at the point of service. like - panipuri, bhelpuri etc.
2. Your friend wants to make a career in Catering and Food Service Management. Guide her about all the career options.

Ans. Careers in Catering and Food Service Industry -

- i. Food Service Supervisor
- ii. Cafeteria Manager
- iii. Food Service Director
- iv. Opening independent restaurant
- v. Executive Chef
- vi. Catering services in institutions

- vii. Catering in amusement parks
- viii. Catering in parties and functions
- ix. Supplying nutritionally modified healthy foods
- x. Job in air, train, cruise ships

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple Choice Questions

1. _____ is the practice or business of making, transporting and serving prepared foods.
 - a. Food service
 - b. Food service manager
 - c. Home based food service
 - d. Food service industry
2. Which type of food is in demand in fairs, exhibitions, rallies, meetings?
 - a. Frozen foods
 - b. Cheap foods
 - c. Readymade foods
 - d. Halfcooked foods.
3. Chain of restaurants is an example of which food service system?
 - a. Assembly service system
 - b. Ready prepared food service system
 - c. Conventional food service system
 - d. Commissary food service system
4. Which of the following point need not be considered while preparing menu plan?
 - a. Climate
 - b. Food service system
 - c. Variety
 - d. Cost

(B) Match the following

- | | |
|----------------------------|------------------------------------|
| A. Food service industry | i) Food business |
| B. Food service management | ii) Responsibility of food service |
| C. Food service | iii) Serving food aesthetically |
| D. Food service manager | iv) Hotel, restaurant |

Pick the correct option

- a) Aiv, Biii, Ci, Dii b) Ai, Bii, Ciii, Div
c) Aii, Bi, Civ, Diii d) Aiii, Biv, Cii, Di

(C) Fill in the blanks

1. Food service industry is also called _____ industry.
2. Catering services are of two types - _____ and _____
3. _____ establishments are elegant and luxurious.
4. Three star hotels are _____ establishments.
5. Dining halls of hostels are _____ food service systems.

(D) Picture based Question

1. Identify the picture and name the Indian state to which this cuisine belongs to?

**(E) Very Short Answer Questions**

1. In ancient times in India, travellers who went on pilgrimages had food at which place?
2. With scientific and technological advancements, what changes have taken place in food service and food management industry?
3. Why has Cuisinology become an area of interest?
4. Komal wants to open his own snack bar. Which two skills he should have for this?

Case Study Based Question (1 mark × 3)

Catering can also be regarded as a service that provides a pleasant change from home cooked food. A family including the homemaker herself may like to enjoy a meal that has been prepared and served in different and pleasant surroundings. More families are now eating out at weekends or go out to eat sometimes in the evening for pleasure.

Also, many families increasingly travel away from home on holidays. They need to eat while traveling and throughout the holiday period in restaurants/ hotels etc, making national and international tourism and catering a 'growing' industry.

1. Workers receiving free meals from the company is which type of catering service?
 - a. Commercial service b. Non Commercial service
 - c. Food service manager d. Menu compiling service
2. _____ is not an Indian Cuisine.
 - a. Gujarati b. Punjabi
 - c. Russian d. Bengali

OR

Out of the following, _____ is not a resource in management in food service.

- a. MONEY b. MUSIC
 - c. MACHINES d. MATERIAL
3. People who are interested cooking and have obtained specialised training also, what can they become from the following?
 - a. Executive Chef b. Snack bar Manager
 - c. Food Service Director c. Purchase Manager

OR

_____ is the foundation based on which the participants at various hierarchal levels, are enabled to execute their work effectively.

- a. Organising b. Directing
 - c. Planning d. Coordinating

Short Answer Questions (2 Marks)

1. Today the demand for different cuisines and special regional foods has increased. Owing to this increasing demand, describe the significance of Catering and Food Service Management.
2. What is menu compiling? Give two advantages of making it.
3. A person selling pani puri, bhel puri in the market is using which food service system, explain briefly.

4. Roopam is a food service manager. Which four qualities are essential in him for success in his profession?

Long Answer Questions (3 Marks)

1. Make a table and tell that the following food service establishments are of which type? Creche, Nursing home, Food service in mall, Club, Supplementary feeding programme of government, Three star hotel.
2. By giving examples, differentiate between Commissary food service system and Conventional food service system.
3. You want to put up a food stall in your school fete. While making a menu plan for your stall, which six points you will keep in mind?

Long Answer Questions (4 marks)

1. Deepanshu has got a job in a 5-star hotel in a hilly area. Which four skills are needed in him for this profession? Also write four advantages of working in this hotel.
2. Rahul has taken a training in Catering and Food service management. Make a list of areas where he can make his career.

Long Answer Questions (5 marks)

1. Categorise Catering services, based on their social and economic significance. Give four examples of each service.
2. What do you understand by Management in food service? Discuss all the functions of management.

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5. FOOD PROCESSING AND TECHNOLOGY

‘POINTS TO REMEMBER’

1. Food Science

It is a distinct field involving the application of basic sciences such as chemistry and physics, culinary arts, agronomics and microbiology. Food scientists have to use the knowledge of biology, physical sciences, and engineering to study the composition of foods changes that occur at various stages from harvest through different processes and storage, causes of their spoilage and the principles underlying food processing.

2. Food Processing

It is the set of methods and techniques used to transform raw ingredients into finished and semi - finished products.

3. Food Technology

Technology is the science and application of scientific, as well as socio-economic knowledge and legal rules for production. Food technology uses knowledge of Food Science and Food Engineering to develop skills for selection, storage, preservation, processing, packaging, distribution of safe, nutritious, wholesome, desirable, affordable convenient foods.

4. Food manufacturing

It is the mass production of food products using principles of food technology to meet the diverse needs of the growing population.

5. Initially, foods were processed primarily to improve digestibility, palatability and to ensure a continuous supply e.g pickles, murabbas and papads.

6. With passage of time, improved transportation, communication and increasing industrialisation there is now increasing demand for convenient foods, fresh and more natural foods, safer and healthier foods and foods with adequate shelf life.

7. Reason for demand and requirement of food technology.

- i. India has progressed from an agro-deficit to an agro-surplus country creating need for storage and processing of agricultural

and horticultural produce.

- ii. changes in lifestyle
- iii. increasing mobility
- iv. globalisation
- v. food fortification is done by adding the nutrient that is lacking in the food stuffs or condiments to ensure that minimum dietary requirements are met.
- vi. Increasing prevalence of diseases like heart disease and diabetes and concern about wellness, has made it necessary for scientists to alter the nutrient content of foods.
- vii. Consumer perceptions about food have changed.
- viii. Demand for foods free of chemicals, pesticides and preservatives is rapidly increasing.

8. Development of Food Processing and Technology

- i. In 1810, Nicolas Appert developed canning process.
- ii. In 1864, Louis Pasteur did research on spoilage of wine. Also he conducted research on production of alcohol, vinegar, wines, beer and souring of milk. He developed 'pasteurisation'- the process of treating milk to destroy disease producing organisms.
- iii. In the 20th century, world wars, exploration of space and the rising demand for varied products from consumers contributed to the growth of Food Technology. Also needs of working women contributed to the growth of Food technology.
- iv. Food technologists made efforts to provide both safer and fresher food using new techniques because -
 - Food preferences and choices changed.
 - People started incorporating preparations from different regions and countries
 - Desire to have seasonal foods all year round increased.

9. Factors that lead to food deterioration or spoilage.

- i. Foods are subject physical, chemical and biological deterioration.
- ii. Food deterioration is associated with spoilage, development of off-flavours, deterioration of textures, discoloration and loss of

nutritional value in varying degrees, reducing aesthetic appeal and rendering it unfit for consumption.

- iii. Factors that lead to food deterioration are pests, infestation by insects, inappropriate temperatures used for processing and storage, excessive exposure to light and other radiations, oxygen and moisture.
- iv. Food is also contaminated by micro organisms (bacteria, fungus and moulds) or chemicals such as pesticides.
- v. Food can also be spoiled due to degradation by naturally present enzymes.
- vi. Also, physical and chemical changes in certain constituents of food from plant and animal sources occur soon after harvesting or slaughtering, altering the food quality.

10. Old methods of food processing and preservation

- i. Sun drying
- ii. Controlled fermentation
- iii. Salting/ pickling
- iv. Candying
- v. Roasting
- vi. Smoking
- vii. Baking
- viii. Using spices as preservatives

11. Classification of Foods Based on Perishability

- i. Perishable foods-** Perishable foods are foods that spoil quickly within one or two days eg. milk, curds, fish and meat.
- ii. Semi perishable foods-** These foods can last for 1-2 weeks. Eg. are fruits and vegetables. Root crops like onions and potatoes last for 2-4 weeks.
- iii. Non-Perishable foods-** These foods generally last for one year eg. grains like rice, wheat, pulses and dals, oilseeds.

12. Basic concepts in food processing methods to prevent food spoilage are

- i. Application of heat

- ii. Removal of water moisture
- iii. lowering of temperature during storage.
- iv. Reduction of pH
- v. Controlling the availability of oxygen

13. Classification of Processed foods- Processed foods can be classified on the basis of extent and type of processing as follows: - (Fig. 5.1)



Preserved Foods



Manu Factured Foods

Formulated Foods



Functional Foods

Medical Foods

Processed foods

- i. Minimally processed foods-** These are processed as little as possible in order to retain the quality of fresh foods. Generally the processes used are cleaning, trimming, shelling, cutting, slicing and storage at low refrigeration temperatures.
- ii. Preserved foods-** The methods of preservation used do not change the character of the product substantially eg. frozen peas and frozen vegetables, dehydrated peas, dehydrated vegetables, canned fruits and vegetables.
- iii. Manufactured foods-** In such products, the original characteristics of the raw products are lost and some basic methods of preservation are used, often using various ingredients such as salt, sugar, oil or even chemical preservatives eg. pickles, jams, marmalades, squashes, papads, wadis.
- iv. Formulated Foods-** These are products prepared by mixing and processing of individual ingredients to result in relatively shelf stable food products such as bread, biscuits, ice cream, cakes, kulfi.
- v. Food derivatives-** In industry, components of foods may be obtained from the raw product through purification, eg. sugar from sugarcane or oil from oil seeds.
- vi. Functional foods-** These are foods that can have a beneficial effect on human health eg. probiotics, lycopene
- vii. Medical foods-** These are used in dietary management of diseases for eg. low sodium salt, lactose-free milk for persons with lactose intolerance.

14. Stages of categorisation of food production

- i. Food as a material
- ii. Food Product development
- iii. Recipe development

15. A food technologist requires knowledge and skills about -

- i. Food science, food chemistry, microbiology, food processing, safety/ quality assurance, good manufacturing practices and nutrition.
- ii. Analysis of raw and cooked/ manufactured foods for composition, quality and safety.

- iii. Food ingredients, their uses in food preparations, and food production on a large scale.
- iv. Product specifications and food product development.
- v. Sensory evaluation and acceptability.
- vi. Industrial practices, systems control, distribution channels, consumer purchase patterns.
- vii. Food packaging, and Labeling.
- viii. Ability to use information technology to support product design.
- ix. Carry out sensory evaluation.
- x. Skills in food preparation and cooking
- xi. Ability to design, analyse, follow a design brief and adapt recipes.

16. Courses offered

- i. After successful completion of 10+2 or equivalent examination, one can pursue short term certificate, craft and diploma courses at various institutes/ colleges in different states as well as at the Central Food Technological Research Institute (CF TRI).
- ii. Many universities in India and abroad offer graduate and post graduate degrees in the field. There are institutes offering post graduate courses in specialised aspects of Food Processing and Technology.

17. Areas of work of food technologists -

- i. Food industries
- ii. Quality Control departments
- iii. Hotels
- iv. Hospitals
- v. Labeling and packaging industries
- vi. Breweries/ distilleries
- vii. Soft drink industries
- viii. Dairy
- ix. Confectionery
- x. Fish and meat processing
- xi. Fruit and vegetable processing
- xii. Processing of grains
- xiii. Cereals, millets, rice and flour mills

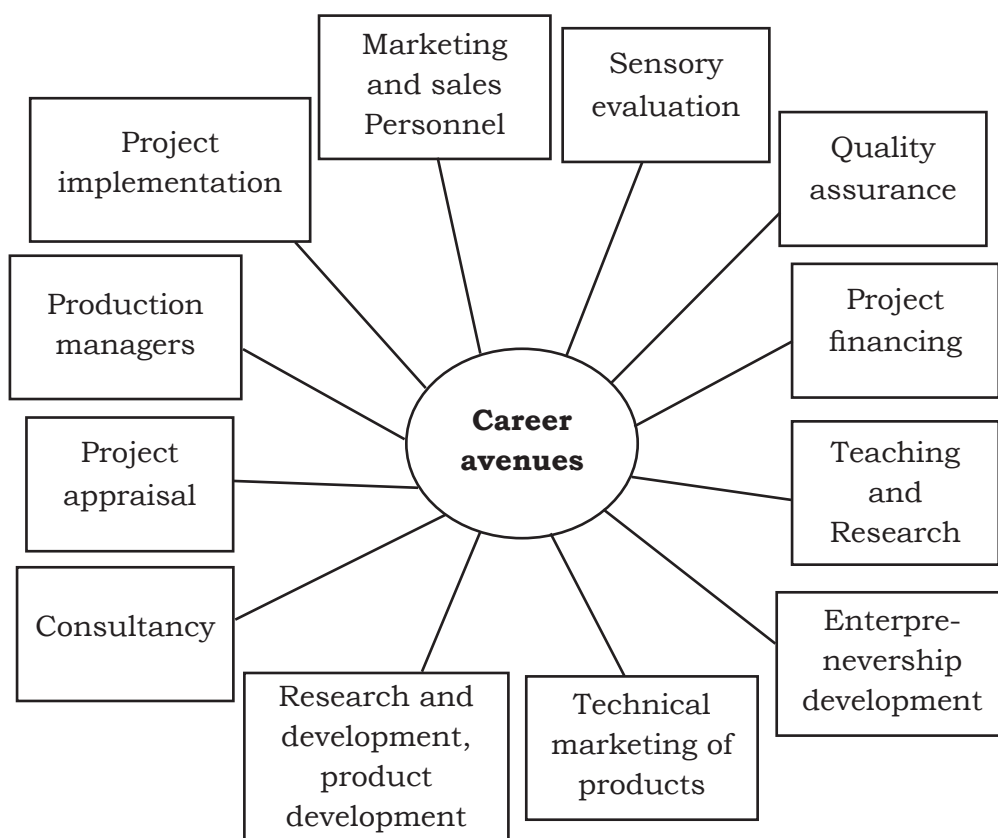
18. Various departments where expertise of food technologists are used-

- i. Purchase and storage

- ii. Processing/ manufacture
- iii. Quality monitoring and management
- iv. Safety assessment
- v. Research and development

19. Self-Employment Avenues

- i. Food processing in India has always been practised as household or cottage scale activity eg. sweets, papads, murrabas, pickles, fried snacks, roasted and puffed cereals were prepared.
- ii. Now with the growth in agriculture, horticulture and pisciculture, the production of raw material has improved.
- iii. Government is giving incentives and support for entrepreneurs who want to start their own enterprise by way of providing



- finances, training, infrastructure and marketing facilities.
- iv. Financial support is provided by many banks with encouragement for women entrepreneurs.
 - v. State Governments also contribute by providing space to those desirous of obtaining the same.
 - vi. A self employment venture in food technology may be highly technology-oriented and investment - intensive, or it can be a very low key technology and low investment unit eg. salted peanuts, drinking water pouches, dehydrated products, pickles.

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice Questions

1. In what ways can food be spoiled?
 - a. Physical deterioration
 - b. Chemical deterioration
 - c. (a) and (b)
 - d. Dehydration

Ans. c physical deterioration and chemical deterioration.

2. Which processed food is frozen peas?
 - a. Preserved foods.
 - b. Manufactured foods
 - c. Formulated foods.
 - d. Medical foods.

Ans. a Preserved foods.

3. Which foods spoil quickly within one or two days?
 - a. Perishable foods.
 - b. Semi perishable foods
 - c. Non-perishable foods
 - d. Processed foods.

Ans. a Perishable foods.

4. Which of the following food is an example of manufactured foods?
 - a. Lactose free milk
 - b. Canned fruits
 - c. Jam, Marmalades
 - d. Cake

Ans. c Jam, Marmalades

2. Which of the following is not a cause of food spoilage?
 - a. Pests attack
 - b. Extreme moisture content
 - c. Application of salt
 - d. Micro organisms

Ans. c application of salt.

(B) Match the following: -

- | | |
|-------------------------|---------------------------|
| A. Perishable foods. | (i) Fruits and vegetables |
| B Semi-perishable foods | (ii) Wheat, pulses |
| C Root crops | (iii) Milk |
| D Non-Perishable foods | (iv) onions and potatoes |

Pick the correct option

- | | |
|-------------------------------|--------------------------------|
| a. A(iii), B(i), C(iv), D(ii) | b. A(i), B(iii), C(ii), D(iv) |
| c. A(ii), B(i), C(iv), D(iii) | d. A(iv), B(iii), C (ii), D(i) |

Ans. a) A(iii), B(i), C(iv), D(ii)

Picture based Question.

1. Name the type of processing and what is added in this product to preserve it?



Ans. Pickle is a manufactured food and salt, oil are added to preserve it.

(C) Fill in the blanks:

- Food _____ and _____ are required to preserve food in edible and safe form.
- _____ is done by adding the nutrient that is lacking in the food stuffs or condiments to ensure that minimum dietary requirements are met.
- In 1810 _____ developed canning process.
- Bacteria prefer _____ rich foods eg. meat, fish.

Ans. 1. Processing and preservation.

2. Food fortification

3. Nicolas Appert

4. Protein

Very Short answer questions

- On 14 January 2010, the Government of India announced the establishment of which by 2012 to promote India's food processing industry?

Ans. Setting up of 30 mega food processing parks

2. Which are the resource foods that maintain the quality of fresh foods?

Ans. Minimally processed foods.

3. Who took the step of pasteurization in the year 1864 to ensure protection from food microbes ?

Ans. Louis Pasteur

Case Study Based Question (1mark x 4)

With globalisation, Indian shares have opened up to foreign investments and technologies. As a result, many foreign companies and multinational companies are setting up their production, R and D educational and outsourcing facilities in our country. Thus there is ample scope for food technologists/ scientists in Indian as well as foreign organisations. Also, food processing industry provides good opportunity for export of products. Employment exchanges will also be strengthened and upgraded.

1. There have been food processing activities in India since the beginning. Which of the following is example of this?
- a. Pickles b. Papad
c. (a) and (b) d. Cake

Ans. c Pickles and papad

2. What is the reason for improvement in production of raw materials?
- a. Growth in agriculture b. Growth in horticulture
c. Increase in production d. (a) and (b)

Ans. d Growth in agriculture and horticulture.

3. How does the government give encouragement and support to those people who want to set up their own enterprise?
- a. By providing finances. b. By training
c. By not providing marketing facilities
d. (a) and (b)

Ans. (d) by providing finances and training

4. Which of the following statement is incorrect?
- Many banks do not provide financial support for women entrepreneurs.
 - State government contribute by providing space to entrepreneurs.
 - A self employment venture in food technology may be highly technology-oriented and investmet-intensive.
 - India has progressed from to an agro-deficit to an agro-surplus country.

Ans. Many banks do not provide financial support for women entrepreneurs.

Short answer questions (2 marks)

1. Give reasons that increased the demand and need for different types of products and new technology.

Ans (i) Changes in lifestyle

(ii) Increasing mobility

(iii) Globalization

(iv) India has progressed from an agro-deficit to an agro-surplus country.

2. Give examples of changing the amount of certain nutrients in the food. Also tell why is it done?

Ans. Increasing prevalence of diseases like heart disease and diabetes has made it necessary for scientists to alter the nutrient content of foods example -

- Reducing the calorie content of processed foods in several ways such as using artificial sweeteners.
 - Fat from ice creams is replaced by specially treated proteins
3. What are the old methods for food preservation?

Ans. The oldest methods were sun drying, controlled fermentation, salting/ pickling, candying, roasting, smoking, baking and using spices as preservatives.

4. Name the micro organisms that cause food spoilage. Also write factors influencing microbial growth.

Ans. Micro organisms that cause food spoilage are -

- i. Bacteria ii. Fungi
- iii. Yeasts iv. Moulds

Factors influencing microbial growth are -

- i. Nutrient availability ii. Moisture
- iii. pH, oxygen levels
- iv. Presence or absence of inhibiting substances.

Short answer questions (3 marks)

1. What are the basic concepts in food processing methods to prevent food spoilage?

Ans. The basic concepts in food processing methods to prevent food spoilage are:-

- i. Application of heat
- ii. Removal of water moisture
- iii. Lowering of temperature during storage
- iv. Reduction of pH
- v. Controlling the availability of oxygen
- vi. Controlling the availability of carbon dioxide

2. What are the functions involved in the field of food industry?

Food industry is involved in -

- i. Processing / manufacture
- ii. Research and development (modifying existing food products, developing new products, researching consumer markets and developing new technologies)
- iii. Ensuring food safety
- iv. Monitoring food quality
- v. Improving quality control procedures
- vi. Casting to ensure profitable production
- vii. Regulatory affairs.

3. Classify foods based on perishability

i. Perishable foods - are foods that spoil quickly within one or two days eg. milk, curds, meat and fish.

ii. Semi perishable foods - can last for 1-2 weeks eg. fruits and

vegetables. Root crops like onions and potatoes last for 2-4 weeks.

iii. Non-perishable foods - are those foods that generally last for one year eg. grains like rice, wheat, pulses and dals, oilseeds.

Long answer questions (4 marks)

1. What are the reasons for preserving food? Why has the importance of food technology increased?

Ans. i. Food items are processed to increase their shelf life.
ii. With improved transportation, communication and increasing industrialisation the needs of consumers have become diverse.
iii. Consumers expect foods that have better taste, being shelf stable, easy to package, store and transport.
iv. Increasing demand for foods free of chemicals, pesticides and preservatives.
v. Demand for foods that have natural flavour and appearance
vi. To meet the needs of working women.
vii. Due to choice of seasonal foods throughout the year.
viii. Due to new avenues of food security and employment.

2. Classify processed foods on the basis of extent and type of processing.

Ans. Refer to Points to Remember Number-13

3. What are the career avenues in the field of food processing and technology?

Ans. Various career avenues in the field of food processing and technology are-

- i. Production Managers
- ii. Project Implementation
- iii. Marketing and Sales Personnel
- iv. Sensory Evaluation
- v. Quality Assurance
- vi. Research and Development, Product Development
- vii. Project Financing
- viii. Project Appraisal

4. Which institute is mainly associated with food technology?

Ans. Refer to Points to Remember Number-17

Long answer questions (5 marks)

1. What knowledge and skills are necessary in a food technology profession?

Ans. Refer to Points to Remember Number-15

2. Give the list of information given to consumers on Label.

Ans. The following information is given on label -

- i. Name of the product
 - ii. Name and address of the manufacturer
 - iii. Trade-mark
 - iv. Ingredients
 - v. Batch number, License number
 - vi. Necessary instructions regarding use and storage.
 - vii. Net weight
 - viii. Warning.
 - ix. Name of Brand
 - x. Standardised mark
 - xi. Date of manufacturing
 - xii. Date of expiry
 - xiii. Colours and preservatives added to the product
 - xiv. MRP.
3. What knowledge and skills are needed for professionals in the field of Food Processing and technology.
- i. Food as a material
 - Seasonal availability of food stuffs
 - Nature and properties of food
 - Nutritional content and its analysis.
 - Cost of food stuff
 - Influence of chemical pesticides, time, moisture, temperature and additives
 - Assessment of the quality of raw foods and ingredients for quality production of food.
 - Food Hygiene and Food safety

- Knowledge of information for contemporary food production.
- ii. Food Product Development.
 - Knowledge of food preparation and cooking skills for large scale food production
 - Knowledge of product specifications and testing it.
 - Observing and measuring Quality control as per specifications.
 - Assessment by sensory methods (testing and tasting.
 - Industrial practices and manufacturing systems and their control
 - Labelling and packaging of marketable product
 - Hazard Analysis and Critical Control point
- iii. Recipe Development
 - Expertise in cooking skills and energy use.
 - Uses of ingredients, measuring and weighing them accurately.
 - Designing, analysing and adapting a basic recipe.
 - Food handling skills
 - Food production following hygiene and safety norms.
 - Handling tools and equipment accurately
 - Innovation in product design and preparation according to consumer perceptions.
 - Use of Information technology for contemporary production.

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

A) Multiple choice Question.

1. Name the set of methods and techniques used to transform raw ingredients into finished and semi-finished products.

a. Food Science	b. Food Processing
c. Food Technology	d. (b) and (c) both
2. Reason for demand for food technology

a. Changes in lifestyle	b. Increasing mobility
c. Food production	d. (a) and (b)

3. Who developed process of canning?
 - a. Louis Pasteur
 - b. Nicholas Appert
 - c. CNR Rao
 - d. Ashok Pandey
4. Which micro organisms are responsible for food contamination?
 - a. Bacteria
 - b. Mosquitoes
 - c. Housefly
 - d. Worms

B) Match the following

- | | |
|-----------------------|-------------------------|
| A. Preserved food | (i) Pickles |
| B. Manufactured foods | (ii) canned fruits |
| C. Formulated foods | (iii) Lactose-free milk |
| D. Medical foods | (iv) Cake |

Pick the correct option

- | | |
|--------------------------------|--------------------------------|
| a) A (iii), B(i), C(iv), D(ii) | b) A (ii), B(i), C(iv), D(iii) |
| c) A (ii), B(iii), C(iv), D(i) | d) A (iv), B(iii), C(ii), D(i) |

Fill in the blanks:

1. _____ foods can have a beneficial effect on human health eg. probiotics.
2. Central Food Technological Research Institute (CFTRI) is situated in _____.
3. India has progressed from an agro deficit to an _____ country.
4. On January 14, 2010, government of India announced the setting up of _____ by 2012 to boost food processing industry.

Picture based Question.

1. Name the type of processing in the figure. How is it prepared?



Very short answer questions.

1. Pickles, papads are made in India from the very beginning. These activities are examples of which technology?
2. Which changes occur in certain constituents of food from plant and animal sources after harvesting or slaughtering?
3. What are the foods that are spoiled in 1-2 days?
4. Name any institute where food technology education is imported.

Case Study based Questions (1 marks x3)

Food processing is a branch of manufacturing wherein raw materials are transformed into intermediate food stuffs or edible products through the application of scientific knowledge and technology. Various processes are used to convert bulky, perishable and sometimes inedible food material into more useful, concentrated shelf-stable and palatable foods or potable beverages. Changes in the products often reduce preparation time for the cook. Most of the time processing of foods adds value to the resultant product by increasing storability, portability, palatability and convenience.

1. Food deterioration is associated with -
 - a. Development of off-flavours
 - b. Enhancement of textures
 - c. Discoloration
 - d. (a) and (c)
2. Food can also be spoiled due to _____ by naturally present enzymes.
 - a. Degradation
 - b. Globalization
 - c. (a) and (b)
 - d. Biological

Or

Root crops like onions and potatoes last for _____.

- a. 1-2 days
 - b. 1-2 weeks
 - c. 2-4 weeks
 - d. 1 year
3. Shelf-life of _____ foods becomes longer.
 - a. Medical foods
 - b. Formulated foods
 - c. Preserved foods
 - d. Functional foods

Or

What are stages of knowledge and skills needed for food processing and development?

- (i) Food as a material
- (ii) Food product development
- (iii) Recipe development
- (iv) Training

- a. (i) and (ii) b. (i) (ii), (iii)
- c. (ii) and (iii) d. (iii) and (iv)

Short answer questions (2 marks)

1. Give 4 examples of India's domestic or cottage food industry.
2. Which improved due to increase in agriculture, horticulture and fisheries in India ?
3. Give reasons for spoilage of food.
4. What educational qualifications are required for job in the food industry?

Short answer questions (3 marks)

1. What information should the food processing technologists know?
2. What career options are there in the field of food processing and technology?
3. What knowledge and skills should be required in the field of food processing and technology?

Long Answer Questions (4 marks)

1. What knowledge and skills are required in recipe development in food technology?
2. What are the main factors affecting microbial growth? What is the basic concept of processed methods to prevent food spoilage?

Long Answer Questions (5 marks)

1. What do you understand by food processing? Describe the different classes of foods with examples.
2. How can food be classified based on the extent and type of resources? Explain any 5 with examples.

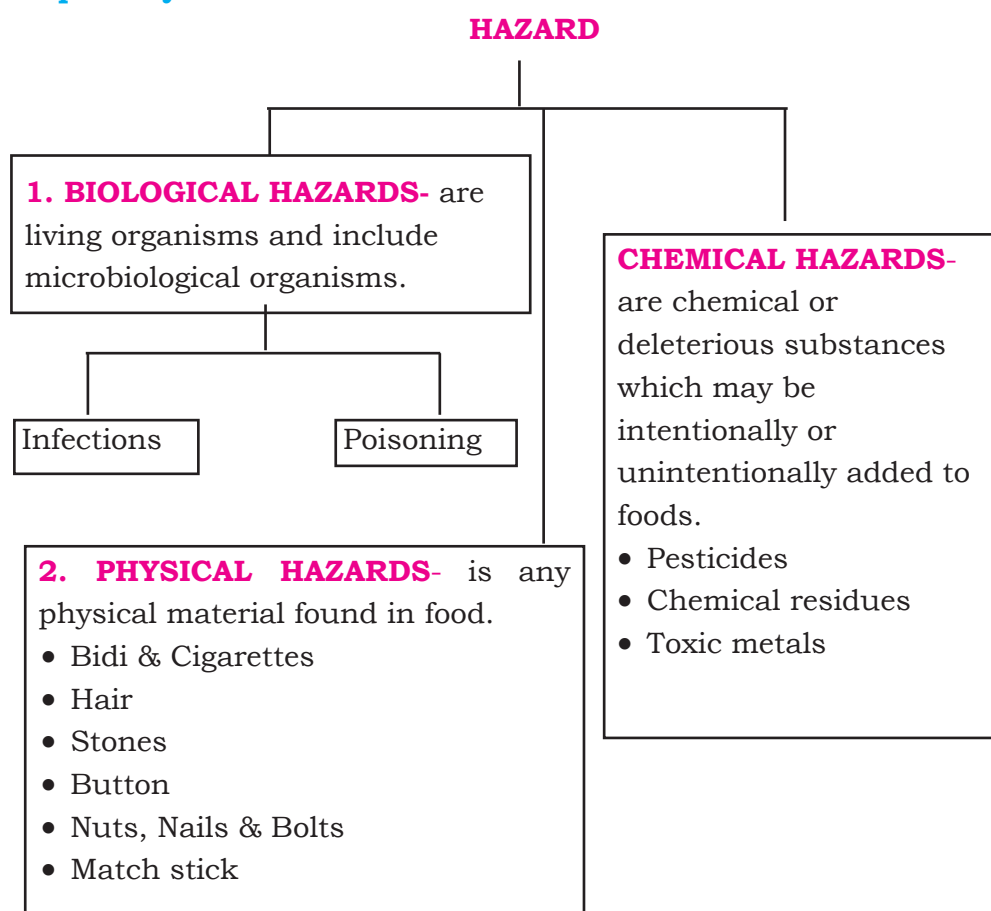
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6. FOOD QUALITY AND FOOD SAFETY

‘Points to remember’

1. Food is a major determinant of health, nutritional status and productivity of the population of a country.
2. The food we eat should be wholesome and safe along with being balanced.
3. Globally, food borne illness is a major problem of public health concern. In the year 2005 approx. 18 Lakh people died of diarrhoea.
4. According to Ministry of Health and Family Welfare. it was stated in September 2010 that more than 300 million episodes of accute diarrhoea occur every year in children less than five years of age.
5. Food safety and quality are important at home level, but are critical in large scale food production and processing because
 - i. With fast changing lifestyles and eating habits, more people are eating outside their homes.
 - ii. Processed and packaged foods are more in trend.
 - iii. The demand of various types of spice powder and mixes has increased.
 - iv. There is a long gap between processing and consumption of food.
 - v. There is increase in the incidence of food-borne microbial diseases at international level.
 - vi. India is a signatory to the World Trade Organisation (WTO) non-tariff agreement, which has provided greater access to world markets and international trade.
 - vii. Pollution in atmosphere soil and water including use of pesticides in agriculture contaminate food.
 - viii. Use of additives such as preservatives, colourants flavouring agents and other substances such as stablizers.

6. **Food Safety**-Food safety means assurance that food will not cause any harm to the consumers.
7. **Toxicity**-It is the capacity of a substance to produce harm on injury of any kind under any condition.
8. **Hazard**- Hazard is the relative probability that harm or injury will result when substance is not used in prescribed manner and quantity.



9. **Food infection / Food Poisoning-** It results from ingestion of live pathogenic organisms which multiply in the body and cause disease.

10. Characteristics of Salmonella-

- This organism exists in the intestinal tract of animals.
- Heat destroys Salmonella
- Inadequate cooking allows some organisms to survive.
- Often Salmonella is spread through cross contamination.

Sources: Raw meat / poultry, raw milk, eggs.

11. Food intoxication: Some bacteria produce harmful toxins which are present in food even if pathogen has been killed. Organisms produce toxins when the food has not been hot enough or cold enough. Toxins in food cannot be detected by smell, appearance or taste Example- Staphylococcus aureus.

- i. Such organisms exist in air, dust, water. They are also present in the nasal passage, throat and on skin, hair of 50% of healthy individuals.
- ii. Parasites can also cause infestation e.g. worm infestation by tape worm in pork.
- iii. Food can be infested by pests and insects.

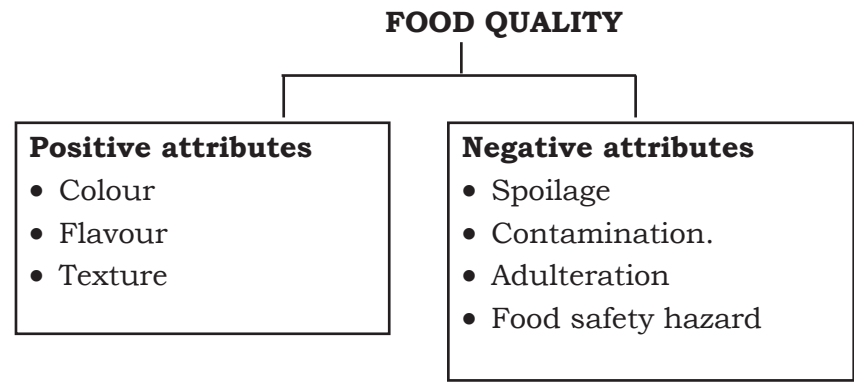
12. Among the various hazards, biological hazards are important cause of food borne illnesses. In spite of all the efforts in the area of food safety, microbial food borne pathogens are still a serious concern and new pathogens continue to emerge.

- i. Human host, animal hosts and their interactions with humans & the pathogen it self lead to emergence of new pathogens.
- ii. The environment including how food is produced processed, handled and stored leads to emergence of new pathogens
- iii. Changes in host susceptibility due to malnutrition, age and other conditions can allows emergence of new infections in vulnerable populations.
- iv. Genetic exchange or mutations in the organisms can create new strains with potential to cause disease.
- v. Exposure to new pathogen through changes in eating habits, climate, mass production, food processing and increased globalization of the food supply can allow pathogens to emerge in new populations or new geographic areas. Examples: Norovirus, Rotavirus, hepatitis E etc.

13. CONTAMINATION AND ADULTERATION

CONTAMINATION	ADULTERATION
It is the presence of harmful, or objectionable foreign substances in food such as Chemicals, micro-organisms, dilutants before/during or after processing or storage.	It is intentional or accidental addition of impure or cheap or unnecessary ingredients, to cheat, cheapen or falsify a preparation, that will alter the properties and composition and diminish the quality of food.

14. **FOOD QUALITY:** The term food quality refers to attributes that influence a product's value to consumers. It has both negative and positive attributes.



15. **Salient points to be borne in mind to ensure food safety.**

- i. Quality of raw material and water
- ii. Cleanliness of the premises, personnel, equipment, food preparation and storage & serving areas.
- iii. Storage of food at appropriate temperature.
- iv. Food hygiene
- v. Good service practices.

16. **Food Standards-**

Effective food standards and control systems are required to integrate quality into every aspect of food production and service, to ensure the supply of hygienic, wholesome food as well as to facilitate trade within and between nations. There are four levels of standards which are well coordinated.



17. FOOD STANDARDS REGULATIONS IN INDIA

I. VOLUNTARY PRODUCT CERTIFICATION: These are voluntary grading and marking schemes.

- i. ISI Mark- ISI mark is given by BIS. The Bureau of Indian Standards (BIS) deals with standardization of various consumer goods including food products.
Items having ISI Mark include various consumer goods and food products.



Picture-6.1

- ii. AGMARK- Agmark is a voluntary scheme of certification of agricultural products (raw and processed) for safe guarding the health of consumers. Examples- Besan, Atta Grains, Spices, Ghee, Honey etc.



Picture-6.2

II. FSSAI 2006- Since the government had several regulations and laws, food industry found it complicated. A need was therefore felt to integrate all such laws for regulating the quality of food

with this in view, Indian Government has passed Food Safety and Standards Act (FSSA), 2006, to bring different pieces of legislation pertaining to food safety under one umbrella.

OBJECTIVES

- i. To consolidate the laws relating to food.
- ii. To lay down science based standards for food.
- iii. To regulate food manufacture, storage, distribution, sale and import.
- iv. To ensure availability of safe and wholesome food for human consumption.
- v. The Act has provisions for maintenance of hygiene conditions in and around manufacturing premises, assessment and management of risk factors to human health in scientific manner.



Pic : 6.3 Food Safety and Standards Authority of India

18. INTERNATIONAL ORGANISATIONS AND AGREEMENTS IN THE AREA OF FOOD STANDARDS, QUALITY RESEARCH AND TRADE

There have been several international organisations and agreements in the present times which have played a role in enhancing food safety, quality and security, facilitating research and trade.

- i. Codex Alimentarius Commission- CAC is an intergovernmental body formed with the objective of establishing international standards to protect the health of the consumers and facilitate food and agricultural trade.
- ii. In 2017, the membership of Codex was 187 member countries and one Member Organisation (European Community) respectively.
- iii. India is a member through the Ministry of Health and Family Welfare.

International Organisations And Agreements In The Area Food Standards, Quality, Research And Trade



Picture:6.4

- **Objectives of CAC**

- to protect consumer health
- The document published by the CAC includes standards, Code of practice, Guidelines and other recommendations. to ensure fair practices in food trade.
- International Organisation for Standardization (ISO)
 - ISO is a worldwide non-governmental federation
 - To facilitate the international exchange of goods and services.
 - To develop cooperation in the spheres of intellectual, scientific, technological and economic activity.

- The work done by ISO results in international agreement's which are published as International Standard.
 - ISO 9000 is an international reference of quality requirements.
- iv. World Trade Organisation (WTO)
- WTO was published in 1955.
 - The main objective of WTO is to help trade flow smoothly freely, fairly and predictably, by administering trade agreements.
 - To help settling trade disputes, assisting countries in trade policy issues.
 - The WTO Agreement covers goods, services and intellectual property.

19. Food Control System- In order to enforce adoption and implementation of standards, there is a need for a strong Food Control System. It must consist of-

- i. Food Inspection
- Conformity of products to standards is verified through inspection
 - This ensures that all foods are produced, handled, processed, stored and distributed in compliance with regulations and legislation.
 - Government/ Municipal authorities appoint food inspectors to investigate the status of quality conformity to standards in their laboratories.
- ii. Analytical Capability-
- There is a need for well equipped state of the art accredited laboratories to carry out analysis of food.
 - Well-trained personnel having knowledge of principles of laboratory management and physical chemical and microbiological analysis of food, test foods and food products are also required.

20. FOOD SAFETY MANAGEMENT SYSTEMS

A food hazard can enter/ come into the food at any stage of the food chain, therefore, adequate control through out the

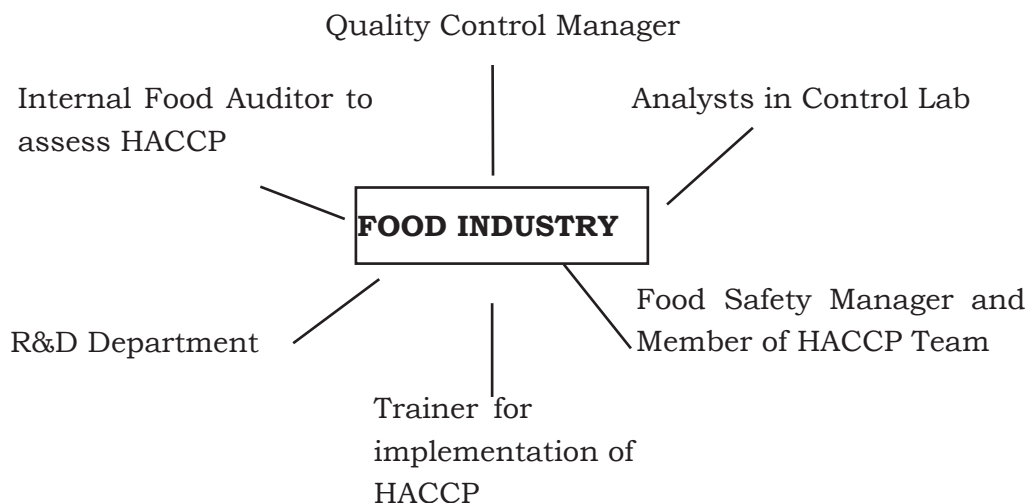
food chain is essential. Food safety and quality can be ensured through:

- i. Good Manufacturing Practices (GMP)
 - These are a part of quality assurance.
 - It enables to minimise or eliminate contamination and false labeling
 - It helps to refine compliance and performance by manufacturers /producers.
- ii. Good Handling Practices (GHP)
 - It indicate a comprehensive approach from the farm to the store /consumer
 - It ensures that all persons who handle food have good hygiene practices.
- iii. Hazard Analysis Critical Control Point (HACCP)
 - It is a means of providing assurance about safety of food.
 - It is an approach to food manufacture and storage.
 - It identifies hazard, assessment of chances of occurrence of hazard during each step/ stage in raw material -procurement, manufacturing, distribution, usage of food products and defining measures for hazard control.

BENEFITS OF HACCP

- i. It is a preventive approach to ensure food safety.
- ii. HACCP enables us to detect hazards at any stage of processing or manufacture in order to ensure a good quality product, by taking appropriate action at the stage where the problem occurs.
- iii. This is important for consumer protection and international food trade.
- iv. It assures consistently good quality products.
- v. It enables producers, procesors, distributors and exporter to utilise resources efficiently and in a cost effective. manner for assuring food safety.

21. SCOPE



22 CAREER AVENUES

Careers opportunities in the field of food Quality and food Safety.

- Quality control laboratories in Industry as analysts or at managerial level.
- Food testing laboratories in public and private sectors-various positions including food inspectors, food testing.
- Specialist in HACCP.
- Food Auditors.
- Quality Certification such as ISO.
- Teaching and Academics.
- Research.
- Scientific writers.
- In voluntary organisations in various capacities.

Full forms of Abbreviations

1. G.H.P. - Good Handling Practices.
2. G.M.P. - Good Manufacturing Practices.
3. H.A.C.C.P - Hazard Analysis Critical Control Point.
4. W.T.O. - World Trade Organisation.

- 5. P.F.A. - Prevention of Food Adulteration Act.
- 6. BIS. - The Bureau of Indian Standards.
- 7. F.S.S.A. - Food Safety and Standards Act.
- 8. C.A.C - Codex Alimentarius Commission.
- 9. I.S.O - International Organisation for Standardization.

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice questions

1. What is the share of food industry in the gross domestic product (GDP) of India?
- a. 62%
 - b. 34%
 - c. 26%
 - d. 50%

Ans. c. 26%

2. Which of the following does not depend on food consumed by human?
- a. Health
 - b. Nutritional Status
 - c. Conscience
 - d. Productivity

Ans. c. Conscience

3. Which of the following is visible biological hazard in food?
- a. Bacteria
 - b. Virus
 - c. Mold
 - d. Worms.

Ans. d. Worms

4. When was Codex Alimentarius Commission formed?
- a. 1960
 - b. 1965
 - c. 1962
 - d. 1969

Ans. b. 1965

5. When is world food Day celebrated?.
- a. 17 June
 - b. 27 June
 - c. 7 June
 - d. 1 July

Ans. c. 7 June

(B) Match the following

- | | |
|--------------------------|--------------------------|
| A. Salmonella | (i) Toxicity |
| B. Staphylococcus aureus | (ii) Metanil Yellow |
| C. Turmeric | (iii) Papaya seeds |
| D. Black Pepper | (iv) Cross-contamination |

Pick the correct option

- | | |
|-----------------------------------|-----------------------------------|
| a. A.(iv), B.(i), C.(ii), D.(iii) | a. A.(i), B.(ii), C.(iii), D.(iv) |
| c. A.(ii), B.(iii), C.(iv), D.(i) | b. A.(iii), B.(iv), C.(i), D.(ii) |

Ans. a) A.(iv), B.(i), C.(ii), D.(iii)

(C) Fill in the blanks

1. Food is a major determinant of health, _____ and _____ of the population.
2. _____ can cause many food borne diseases
3. _____ in the organisms can create new strains.
4. Two examples of newly emerged pathogens are _____ & _____

**Ans. 1. Nutritional status & productivity 2. Unsafe food 3. Mutations
4. Rota virus & Ebola virus**

(D) Picture Based Questions

1. Draw the sign of the following

I.S.I. Mark

Ans.



Picture : 6.6

Very Short Answer Questions (1 mark)

1. Which two components should be incorporated in an effective food control system?

Ans. (i) Food inspection. (ii) Analytical capability

2. Neha used a chopping board to cut raw meat and used the same

board for cutting salad without washing it, which food infection can result in such case?

Ans. Cross-Contamination.

3. What is added as adulterant in tea leaves normally?

Ans. Stalk

4. Define Food Hazard.

Ans. Food hazard in the relative probability that harm or injury will result when substance is not used in prescribed manner or quantity.

Case Study Based Question (1Mark × 4)

Factors that are important in the emergence of pathogens include human host, animal host and their interactions with humans, the pathogen itself and the environment including how food is produced, processed handled and stored. For example, changes in host susceptibility due to malnutrition, age and other -conditions can allow for the emergence of new infections to vulnerable populations.

1. Among the various food hazards, which of the following is main reason of food-borne illnesses ?
 - a. Biological hazards
 - b. Physical hazards
 - c. Chemical hazard
 - d. Electricity hazard

Ans. a. Biological hazards

2. Which of the following medium will not expose humans to new pathogens?
 - a. Changes in eating habits
 - b. Climate
 - c. Food processing
 - d. Food quality

Ans. d. Food quality

3. New_____ and _____ and new geographical areas can allow pathogens to emerge.
 - a. Climate
 - b. Population

- d. Both 'a.' and 'b.'

Ans. d. Both 'a' and 'b'

4. Which of the following statement is wrong?
- a. Salmonella exists in the intestinal tract of animals.
 - b. Cooking at home has decreased due to shortage of time.
 - c. The food we eat should not be nutritious.
 - d. The importance of food safety and quality has increased.

Ans. c. The food we eat should not be nutritious.

Short Answer Questions (2 Marks)

1. Give reasons which have led to increase in the production of processed and functional foods.

Ans.

- i. Advancement in technology and processing**
 - ii. Larger per capita come**
 - iii. Better purchasing power**
 - iv. (iv) Increase in consumer demand**
- 2. How many types of food-borne diseases spread from microbial pathogens ? Give examples also.**

Ans.

- i. Infection eg. Salmonella.**
 - ii. Poisoning eg. Staphylococcus aureus.**
3. Why do we need food standards ?

Ans.

- i. Food standards are required to integrate quality into every aspect of food production and service**
 - ii. To ensure the supply of hygienic wholesome food.**
4. Which are the four levels of standards?

Ans.

- | | |
|---------------------------------|-------------------------------------|
| (i) Company Standards | (ii) National Standards |
| (iii) Regional Standards | (iv) International Standards |

Short Answer Questions (3 Marks)

1. Differentiate between Codex and ISO.

Ans.

Codex	ISO
<ul style="list-style-type: none">• Used to develop national regulations• Slow to change• Describe the minimal acceptable practices	<ul style="list-style-type: none">• Voluntary• Standards are reviewed every five years• Describe current standard industrial practices.

2. How many types of food hazards are there?

Ans.

Food hazards can be of three types

- Physical Hazard-** It is any physical material normally not found in food, which causes illness or injury which includes wood, stone, parts of pest and hair.
- Chemical Hazard-** These are chemicals or deleterious substances which may be intentionally or unintentionally added to foods. Example- pesticides, preservatives, food colours etc.
- Biological Hazard-** These are living organisms and include microbiological organisms.

3. Which organisations have played a key role in enhancing food safety, quality and security, and facilitating research and trade?

Ans.

- Codex Alimentarius Commission (CAC)**
- International Organisation for Standardization (I.S.O.)**
- World Trade Organisation (W.T.O.)**

Long Answer Questions (4 Marks)

1. "In spite of implementation of various rules and laws, biological food borne illnesses are still a serious concern". Discuss.

Ans.

- Human host, animal host and their interaction with humans and pathogen itself lead to emergence of new pathogens.**

- ii. **The environment including how food is produced, processed, handled and stored leads to emergence of new pathogens.**
- iii. **Genetic exchange or mutations in the organisms can create new strains with the potential to cause disease.**
- iv. **Exposure to new pathogens through changes in eating habits, climate.**

Long Answer Question (5 marks)

1. Which salient points are to be borne in mind by food producers & processors to ensure food safety ?

Ans. Refer to Points to Remember Number-15

2. In which year The Food Safety and Standards Act was passed? What are its main objectives?

Ans. Refer to Points to Remember Number-17 (II)



Food Safety and Standards Authority of India

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice questions

1. spoil grains and pulses
 - a. Pests
 - b. Bacteria
 - c. Birds
 - d. Pathogens.
2. Milk and ice-cream are adulterated with.....
 - a. Water
 - b. Hair
 - c. Starch
 - d. Stone
3. In which year was W.T.O. established?
 - a. 1956
 - b. 1955
 - c. 2000
 - d. 2015

4. Which of the following chemical hazard is found in food?
- Button
 - Hair
 - Pieces of bones
 - Non-permissible food adulteration

(B) Match the following

A. F.S.S.A.I.	(i)	1999
B. I.S.I	(ii)	Spices
C. AGMARK	(iii)	Mixi
D. C.A.C.	(iv)	Tomato Sauce

Pick their correct option

- A.(iv), B.(iii), C.(ii), D.(i)
- A.(ii), B.(ii), C.(iii), D.(iv)
- A. (ii), B.(iii), C.(iv), D.(i)
- A. (iii), B. (iv), C.(i), D.(ii)

Fill in the blanks

- According to latest statistics of W.H.O., unsafe food came be the reason of.....types of diseases.
-means assurance that food will not cause any harm to the consumers and is safe for health.
-is an international reference for quality requirements.
- Asafoetida is adulterated with.....

(D) Picture based questions

On which food items following mark found?



Very Short Answer Questions (1 Mark)

- How are National standards different from company standards?
- What do you understand by food adulteration?
- What is the contribution of Home science curriculum especially the discipline of Food Science and Nutrition in the field of food safety ?
- What do understand by "contamination" ?

Case Study based Question (1 Mark×3)

Food infection/Food Poisoning results from ingestion of live pathogenic organisms which multiply in the body and cause disease. Salmonella is a classic example. The organism exists in the intestinal tract of animals. Raw milk and eggs are also sources. Heat destroys Salmonella, however, inadequate cooking allows some organisms to survive.

1. Which of the following is the symptom of Salmonella Infection.
 - a. Diarrhoea
 - b. Sweating
 - c. Cough
 - d. Cold
2. How much time does Salmonella take to double their number?
 - a. 40 min
 - b. 20 min
 - c. 5 min.
 - d. 45 min.

OR

Staphylococcus aureus are present in the nasal passage, throat and on skin, hair of healthy individuals.

- a. 10%
 - b. 20%
 - c. 35%
 - d. 50%
3. Veterinary residues are an example of invisible..... hazards in food.
 - a. Biological
 - b. Physical
 - c. Chemical
 - d. Environmental.

OR

..... is present on agricultural products.

- a. AGMARK
 - b. I.S.I.
 - c. Silk mark
 - d. F.P.O.

Short Answer Questions (2 MARK)

1. Why is food safety and food quality a global issue?
2. Which are the two types of food borne diseases caused by microbial pathogens?
3. What are the qualifications required for professional who wants to take up career in Food Industry.

4. Write any two examples of voluntary product certification?

Short Answer Question (3 marks)

1. How in food safety and food quality ensured by Good handling Practices ?
2. Differentiate between contamination and adulteration with the help of examples.
3. What is Codex Alimentarius Commission.? What are its main objectives.

Long Answer Questions (4 marks)

1. List National and International food standards.
2. Write in detail the scope of food safety and food quality.

Long Answer Questions (5 mark)

1. Write in detail the career opportunities available in the field of Food Safety and food Quality.
2. What are the advantages of implementing H.A.C.C.P.?
3. "Food safety challenges in India as well as all over the world have changed significantly and Food Quality & Food safety has gained importance." Discuss with reasons.

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7. EARLY CHILDHOOD CARE AND EDUCATION

‘Points to remember’

1. **Early Childhood Care and Education is an activity that benefits childhood in different circumstances, as well as families by providing the support to parents and the community in these basic tasks.**
2. **Early Childhood care and Education is also called E.C.C.E.**
3. **Early childhood is the phase from birth till eight years of age, which is divided into two parts -**
 - i. Birth to 3 years
 - ii. 3 to 8 years

This division is based on the developmental changes taking place in young children in these two stages.
4. **Infancy is the period between birth to two years of age, during which a child is largely dependent on adults for his/her everyday needs.**
5. **A child between two to three years. is called as Toddler, who has a tendency to do jumpy walk.**
6. **A preschool child is a child who is ready for experiencing some environment which is beyond that of the family.**
7. **Care given to a child in the absence of the mother is called Substitute care. Child can be given substitute care by the following people :**
 - i. Grand parents
 - ii. Other relatives
 - iii. Elder sister/brother
 - iv. Maid
 - v. Creche
 - vi. Day care centre
8. **Caregiver is a family member or paid helper who regularly looks after a child or a sick, elderly or differently abled person.**

9. There can be many reasons for giving substitute child care-

- i. Untimely death of the mother
- ii. Mother's ill-health/any disease
- iii. Working woman
- iv. Nuclear family

10. There can be many disadvantages of an elder sister caring for her younger brother/ sister like-

- i. She will have to leave her studies.
- ii. She is young, cannot take proper care of the child.
- iii. She can get involved in play, hence it is not safe to leave child with her.
- iv. If some emergency situation arises, like the child falls ill or gets hurt, then she will not be able to handle it.

11. Creche is an institutional setting that is particularly designed for the care of infants and young children in the absence of home care.

Facilities provided by creche-

- i. Feeding facilities
- ii. Resting facilities
- iii. Recreational facilities
- iv. First aid
- v. Informal education.
- vi. Clean and safe environment

12. Day care centres are the centres which provide daytime care to children in the preschool years. In these centres, infants and preschoolers are cared for in the absence of a primary caregiver.

13. Anganwadi means Courtyard shelter. These are a type of rural / urban child care centres as a part of ICDS programme.

14. Social development in Early childhood-

- i. Infant develops an attachment with his family (specially parents, siblings).
- ii. He recognises his family members. Child learns to distinguish

between people who he/ she recognises and those who are unfamiliar for him.

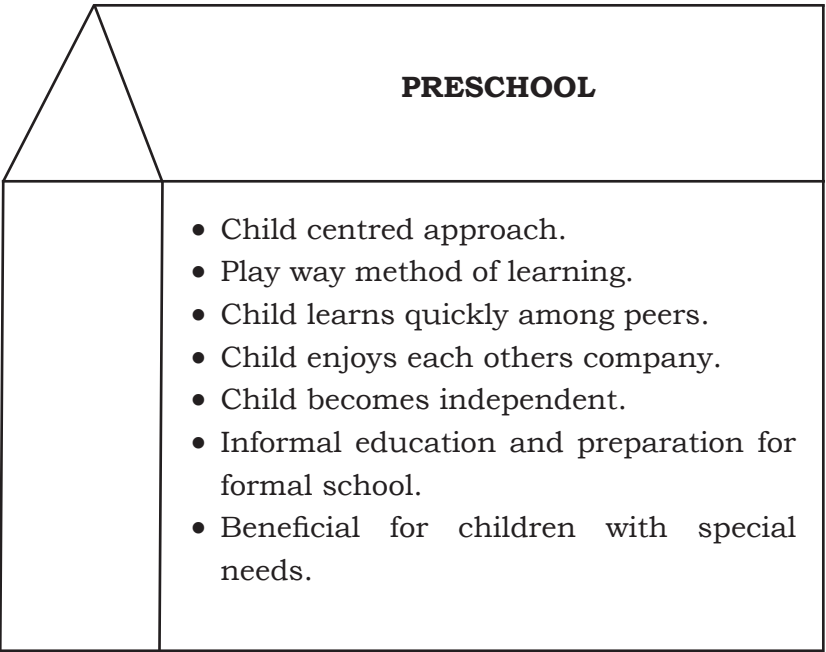
- iii. A child of 8-12 months shows fear of unknown people.
- iv. A 12 month old child is deeply attached to his mother, and cries when she is not around him. Gradually, he understands that mother does not vanish when she goes to another room.

15. Characteristics of a three year old child-

- i. His activities and experiences began to expand.
- ii. Child is able to do informal and small group activities
- iii. Child is very eager to learn new things.
- iv. He learns new things and explores his environment.
- v. He interacts with people and things around him.

16. Preschool education is the provision of education for children before the commencement of formal education between the ages of 3 to 6 years. This education is provided by a good preschool.

Characteristics of a Good Preschool-



17. Montessori schools are those schools which are based on the principles of early childhood education as outlined by a well known educationist Maria Montessori.

18. Some principles related to E.C.C.E.-

- i. Children have different approach to understand things that happen around them.
- ii. All institutions of children should work according to the cultural context of the families of those children.

19. As per the National Curriculum Framework (NCF) 2005, objectives of E.C.C.E. (Early Childhood Care and Education) are-

- i. Holistic development of the child to enable him/her to realise the potential.
- ii. To prepare the child to go to a formal school.
- iii. Providing support services for women and children.

20. As per the National Curriculum Framework (NCF) 2005, the guiding principles of E.C.C.E. (Early Childhood Care and Education) are -

- i. Play should be the basis for learning.
- ii. Art should be the basis of education.
- iii. Special features of children's thinking should be recognised.
- iv. Give importance to experience rather than expertise.
- v. There should be experience of familiarity and challenge in everyday routines.
- vi. There should be a mix of formal and informal interactions.
- vii. There should be a blend of textual and cultural sources.
- viii. Local materials, arts and knowledge should be used.
- ix. Have developmentally appropriate practices, flexibility and plurality.
- x. It is important to teach health, well being and healthy habits.

21. Following are the expectations from a caregiver of young children -

- i. Teacher should teach children in play way method.

- ii. Children should be taught in an interesting and stimulating manner.
- iii. Focus on providing opportunities to children to work.
- iv. Teacher should have complete knowledge about children's capacities.
- v. The activities for the children should be kept according to their cultural and regional environment.
- vi. The teacher should have administrative and management skills like record keeping, accounting, report writing, interaction with parents etc.
- vii. Teacher should have various artistic skills like narrating stories to children, dance, music, voice modulation, organising games etc.
- viii. Young children have short attention span, hence teacher's plan of action should be flexible, which can be changed according to children's needs.

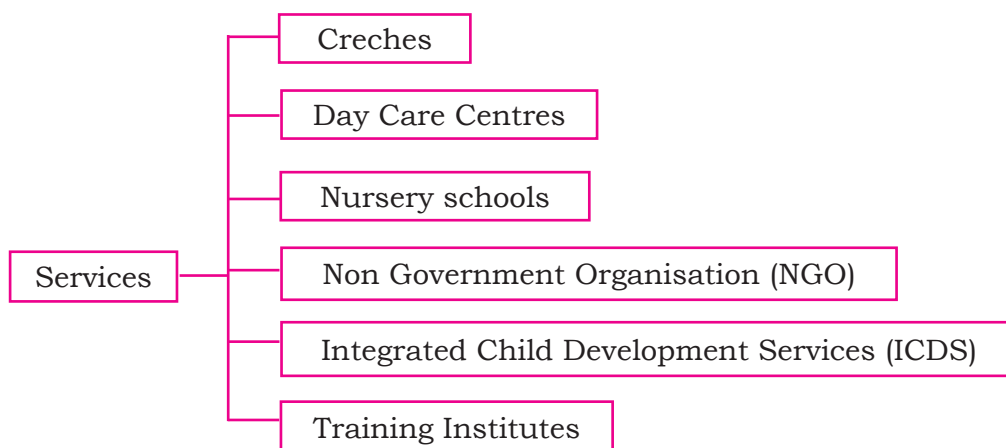
* Vygotsky, a psychologist and educator, had outlined the great need that children have for a concerned, caring and knowledgeable adult.

22. Essential skills that an Early Childhood professional needs to have -

- i. Have an interest in children and their development.
- ii. Have knowledge about the needs and capabilities of young children.
- iii. Have capacity for interacting with children
- iv. Should be able to do creative and interesting activities with children.
- v. Do all activities with children with enthusiasm like story telling, poem recitation, talking about environment related topics etc.
- vi. Children have curious attitude, so there should be willingness and interest in answering their queries.

- vii. Young children are different from each other, capacity for understanding their individual differences.
- viii. Be always prepared for different types of physical activities.

23. Services available in Early Childhood Care and Education-



24. Careers in Early Childhood Care and Education-

- i. Teacher in nursery schools.
- ii. Caregiver in Day care centres and Creches.
- iii. Team members for programmes for young children (like Integrated Child Development Services)
- iv. Professionals to plan and promote campaigns or services for young children organised by government or NGOS.
- v. Entrepreneur in children related activities like organising camps, educational picnics, running activity clubs, opening own preschool.
- vi. Post graduation, Diploma and Degree in Early Childhood Care and Education; higher education in this field. Later Ph.D. with research in this field.

25. Educational qualifications necessary for career in Early childhood field-

- i. Nursery Teacher Training

- ii. Child/Human Development or Child psychology-Graduation/
Diploma and then Post graduation.
- iii. Educational programme from open University.
- iv. Ph.D

Full forms of Abbreviations-

- 1. ECCE - Early Childhood Care and Education
- 2. NCF - National Curriculum Framework
- 3. ICDS - Integrated Child Development Services
- 4. NGO - Non Government Organisation
- 5. NTT - Nursery Teacher Training
- 6. IGNOU - Indira Gandhi National Open University.

OBJECTIVE TYPE QUESTIONS (1 mark)

(A) Multiple Choice Questions

- 1. What is full form of E.C.C.E. ?
 - a. Primary Childhood Care and Education
 - b. Early Childhood Care and Education.
 - c. Early Boyhood Care and Education.
 - d. Early Childhood Education and Care.

Ans. b. Early Childhood Care and Education.

- 2. Child of which age shows fear of unknown people?
 - a. 4-6 months
 - b. 0-2 months
 - c. 6-8 months
 - d. 8-12 months

Ans. d.8-12 months

- 3. Child between two to three years old is called _____.
 - a. Toddler
 - b. Infant
 - c. Adolescent
 - d. School going child

Ans. a. Toddler

- 4. According to psychologist_____, children have a need for a concerned, caring and knowledgeable adult.

- | | |
|-------------|---------------------|
| a. Piaget | b. Maria Montessori |
| c. Vygotsky | d. Prang |

Ans. c.Vygotsky

(B) Match the following

- | | |
|--------------------|---|
| A. Anganwadi | (i) is School for infant to 18 years |
| B. Day care centre | (ii) Child centred approach. |
| C. Preschool | (iii) Courtyard shelter |
| D. Montessori | (iv) Centre providing care during daytime |

Pick the correct option -

- | | |
|-----------------------------------|-----------------------------------|
| a. A.(i), B.(ii), C.(iii), D.(iv) | b. A.(iii), B.(iv), C(ii), D.(i) |
| c. A(iv), B.(ii), C.(i), D.(iii) | d. A.(ii), B.(i), C.(iv), D.(iii) |

Ans. b.A.(iii), B.(iv), C(ii), D.(i)

(C) Fill in the blanks.

- _____ is the phase from birth till eight years of age.
- _____ year old child starts crying loudly when he does not see his mother near him.
- Guiding principles and objectives of Early Childhood Care and Education were given by_____
- _____ is a programme started for children.

Ans.

- Early childhood**
- 12 months**
- National Curriculum Framework 2005**
- Integrated Child Development Services**

(D) Very short answer questions

- Define Early Childhood Care and Education.

Ans.

Early Childhood Care and Education is an activity that benefits childhood in different circumstances, as well as families by providing the support to parents and the community in these basic tasks.

2. Why is substitute care important, give any two reasons.

Ans.

- i. Untimely death of the mother
- ii. Mother's ill-health/any disease

3. Mita is a three year old young child. Tell her any two characteristics.

Ans.

- i. She is able to do informal and small group activities.
- ii. She will learn many new things from her nearby environment.

4. Seema wants to become a teacher in a preschool. Inform her that which two educational qualifications will be helpful to her ?

Ans.

- i. Nursery Teacher Training
- ii. Graduation in Child/Human development or Child Psychology subject.

Case Study based questions (1 mark × 4)

There are many expectations from an adult teacher/caregiver of young children. There is less of a requirement for supervision of physical care of preschool children, like cleaning, feeding, toilet activity since the child develops the capability to speak, to control his or her bowel and bladder movements, eat independently. A teacher needs to focus more on providing interesting and stimulating opportunities for children to learn new things, experience natural phenomena provide ample opportunities for a variety of experiences like physical, language, Social-emotional and other learning experiences. The focus is on enhancing creative expression and exploration.

1. Early childhood is divided into which two parts ?

- a. Birth to 3 years, 3 to 6 years
- b. Birth to 3 years, 3 to 8 years.
- c. Birth to 2 years, 2 to 6 years.
- d. Birth to 2 years, 2 to 8 years.

Ans. b. Birth to 3 years, 3 to 8 years

2. Which of the following is not a suitable means of substitute care ?

- a. Grandparents
- b. Creche
- c. Day care centre
- d. Elder sister (10 year old)

Ans. d. Elder sister (10 year old)

3. Which of the following is a career related to E.C.C.E. ?

- a. Teacher in nursery school
- b. Dietician
- c. University spokesperson
- d. Hotel manager

Ans. a. Teacher in a nursery school

4. Which of the following is incorrect statement?

- a. To care for her younger siblings, elder sister will have to leave her studies.
- b. Ten year old sister cannot properly care her younger siblings.
- c. Younger siblings are safe with ten year old sister.
- d. Ten year old sister cannot handle emergency situations.

Ans. c. Younger siblings are safe with ten year old sister.

Short Answer Questions (2 marks)

1. What do you understand by Caregiver ? In the absence of mother, which two people can look after one year Sonu ?

Ans.

Caregiver is a family member or paid helper who regularly looks after a child or a sick, elderly or differently abled person. Sonu can be looked after by the following two people-

- i. Grandparents
- ii. (Maid

2. Rita is searching a creche for her two year old daughter. Which four facilities she should look for in a good creche?

Ans. Four facilities in a good creche -

- i. Feeding facilities.
- ii. Resting facilities.
- iii. Recreational facilities.
- iv. Informal education.

3. Rohit is eight month old infant and Rohan is of twelve months. Give

one characteristic each of their Social development.

Ans.

- | | |
|---------------|--|
| Eight months | - Child shows fear of unknown people |
| Twelve months | - Child is deeply attached to his mother and cries when she is not around him. |

4. What are the basic objectives of E.C.C.E. ? Where have these been documented?

Ans.

Basic objectives of E.C.C.E. were given in National Curriculum Framework 2005.

Basic objectives of E.C.C.E.-

- i. Holistic development of the child to enable him/her to realise the potential.
- ii. To prepare the child to go to a formal school.
- iii. Providing support services for women and children.

Short Answer Questions (3 marks)

1. Mrs. Kusum wants to select a good preschool for her three year old child. You explain her what characteristics should be there in a good preschool?

Ans.

A good preschool should have the following characteristics-

- i. (Child centred approach.
 - ii. Playway method of learning.
 - iii. Child should learn quickly among peers.
 - iv. Informal education so that the child gets prepared for formal school
 - v. Child should become independent.
 - vi. Child should enjoy company of good peers.
2. Mishika is a three year old toddler. What do you understand by this term ? What are the characteristics of a child of this age ?

Ans.

A child between two and three years is called a Toddler, a term that is

derived from the jumpy walk that a young child has at this age.

Characteristics of Toddlers-

- i. At this age, child's activities and experiences began to expand.
 - ii. Child is able to do informal and small group activities.
 - iii. Child at this age is very eager to learn new things.
 - iv. He learns new things and explores his environment.
 - v. He interacts with people and things around him.
3. Make a list of the services available in the field of Early Childhood Care and Education.

Ans.

Services available in the field of Early Childhood Care and Education-

- i. Creches
- ii. Day care centres.
- iii. Nursery schools.
- iv. Non Government Organisations (NGO)
- v. Integrated Child Development Services (ICDS)
- vi. Training Institutes

Long Answer Questions (4 marks)

1. Shalu wants to make a career in Early childhood. Which essential skills are required in her for this career ?

Ans. Refer to Points to Remember Number-22

2. Your sister wants to make her career in Early Childhood Care and Education. Educate her what career options can be available in this field? Also inform her which two educational qualifications she would need?

Ans.

Career opportunities in Early Childhood Care and Education-

- i. Teacher in nursery school.
- ii. Caregiver in day care centres and Creches.
- iii. Team members for programmes for young children (like Integrated Child Development Services)
- iv. Professions to plan and promote campaigns or services for young

children organised by government or NGOs.

- v. Entrepreneur in children related activities like organising camps, educational picnics, running activity clubs, opening own preschool.
- vi. Research in this field.

Educational Qualifications-

- i. Nursery Teacher Training
- ii. Graduation in Child/Human Development or Child Psychology.

Long Answer Questions (5 marks)

1. Write down the guiding principles of Early Childhood Care and Education, as per the National Curriculum Framework 2005.

Ans. Refer to Points to Remember Number-20

2. Who is a preschool child? What are the expectations from a caregiver of this child?

Ans.

A preschool child is a child who is ready for experiencing some environment which is beyond that of the family.

Following are the expectations from a caregiver of young children-

- i. (Teacher should teach children in play way method.
- ii. Children should be taught in an interesting and stimulating manner.
- iii. Focus on providing opportunities to children to work.
- iv. Teacher should have complete knowledge about children's capacities.
- v. The activities for the children should be kept according to their cultural and regional environment.
- vi. The teacher should have administrative and management skills like record keeping, accounting, report writing, interaction with parents etc.
- vii. Teacher should have various artistic skills like narrating stories to children, dance, music, voice modulation, organising games etc.
- viii. Young children have short attention span, hence teacher's plan

of action should be flexible, which can be changed according to children's needs.

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice Questions.

1. Early childhood is the phase from birth to _____ years of age.
 - a. 4
 - b. 5
 - c. 6
 - d. 8
2. Montessori school was outlined by _____ Montessori.
 - a. Mariyam
 - b. Maria
 - c. Mary
 - d. Mishigan
3. National Curriculum Framework gave objectives of E.C.C.E. in which year?
 - a. 2005
 - b. 2006
 - c. 2000
 - d. 2008
4. Which of the following services are available in the field of Early Childhood Care and Education?
 - a. Creche
 - b. University
 - c. Day care centre
 - d. Both a.and c.

(B) Match the following

- | | | |
|--------------------|-------|------------------|
| A. Early Childhood | (i) | Birth to 2 years |
| B. Infant | (ii) | 3 to 6 years |
| C. Toddler | (iii) | Birth to 8 years |
| D Preschool child | (iv) | 2 to 3 years |

Pick the correct option-

- a. A.(iv), B.(iii), C.(ii), D.(i) b. A.(i), B.(iii), C.(iv), D.(ii)
c. A.(ii), B.(iv), C.(i), D.(iii) c. A.(iii), B.(i), C.(iv), D.(ii)

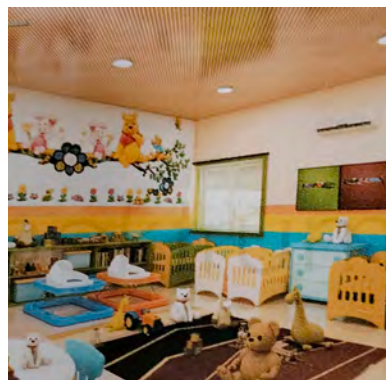
(C) Fill in the blanks

1. Full name of N.T.T. is _____.

2. Early childhood is divided into two parts, based on the _____ changes taking place in young children.
3. Care given to a child in the absence of the mother is called _____ care.
4. _____ education is provided in a creche.

(D) Picture Based Question.

Look at the picture and identify that it is an example of which substitute care?



(E) Very Short Answer Questions.

1. What do you understand by a creche?
2. Raju is a nine month old infant, which emotion will he express when he is picked up by a stranger?
3. "Children should be taught in a play way method in a preschool." What do you understand by this statement?
4. Anganwadis work in rural and urban areas under which programme?

Case Study based Question (1 mark x 3)

In most cases, children are brought up exclusively within a family for the first few years. In some instances, where the mother is working outside the home, there may be a need for substitute provisions for the care of the child. Traditionally, the care of the child was usually the responsibility of another female of the household who lived with the family permanently as in joint families or temporarily resided with the family for support in child care. In recent times, however, there has been an increasing need for the provision of institutional child care.

1. Give the name of that activity that benefits childhood in different circumstances, as well as families by providing the support to parents and the community in these basic tasks.
 - a. Early Childhood Care
 - b. Early Childhood Education

- OR

a. Full day b. Half day
c. Full week d. Half week

- OR

- Integrated Child Development Services
- Integrated Child Development Facilities
- Social Child Development Services
- Social Child Development Facilities

1. What do you understand by Day Care Centre?
2. Write two principles related to E.C.C.E.
3. "Play should be the basis for learning". Justify this statement by giving the importance of play for children.
4. As an entrepreneur, which type of programmes can your brother organize for children ?

Home Science–XII

1. Your mother wants to open a creche. In order to make her creche an Ideal creche, guide her on which facilities she should concentrate
2. In order to become an ideal teacher in a nursery school, you will develop which skills?
3. Preschools should have a child centred approach. Discuss this statement, by giving an example.

Long Answer Questions (4 marks)

1. Define Early Childhood Care and Education. Explain, it has been divided into how many parts and why ?
2. What are the four expectations from a person who wants to make a career in E.C.C.E. field? Which four skills are essential in that person ?

Long Answer Questions (5 marks)

1. You have been given a project to teach in the nursery class of your school for one day. Which methods you will follow to do this project in the best possible manner? Which of your skills will help you in this?
2. According to National Curriculum Framework 2005, write two objectives and eight guiding principles of Early Childhood Care and Education.

-----O-----O-----O-----

8. SPECIAL EDUCATION AND SUPPORT SERVICES

‘POINTS TO REMEMBER’

1. Special Education

- This term refers to educational provisions for children with special needs emerging due to physical, mental and emotional challenges.
- They have Special Educational Needs (SEN)
- Special Education means specially designed instructions for children with above mentioned challenges in all settings such as classroom, home, workplace, public places, the street and the rehabilitation homes etc.
- Special Education is an approach that facilitates their learning and allows them to participate in different activities that they may not have had access to on account of their inability to go to school.
- Children with special needs do not have to always study in a separate institution.
- Some children who have severe difficulties are educated in a classroom prepared exclusively for them for more benefit.

2. Special Educators - The educators / teachers who provide special education are called Special Educators.

3. Inclusive Education - When children / students with Special Education Needs study in general classrooms with their peers, the arrangement is called inclusive education.

4. Purpose of Inclusive Education -

- i. Students with diverse needs (educational, physical, social and emotional) are placed together in age appropriate classes/ groups such that the students can optimally achieve their learning potential.
- ii. The school makes suitable adjustments and modifications in its curriculum, teaching methods and set up to physical facilitate their education.

5. Several models of special / inclusive education.

- i. Some schools impart education exclusively to children with disabilities.
 - Such schools offer services to children with specific disabilities, such as those with intellectual impairment, cerebral palsy, visual impairment.
 - These schools require the services of special educators who are trained in working with children with specific disabilities.
- ii. Inclusive Education - means including children with disabilities in regular classroom.
 - An inclusive school has within its premises, facilities for children with Special Educational Needs..
 - All the students are placed in regular classes.
 - In such a system, the special educators would not directly teach children with SEN, but provide pedagogical (instructional) support to the regular teachers.
- iii. Integrated Education - emphasises placement of children with disability in mainstream school.
 - The special educator then co-ordinates work with regular teachers and provides extra inputs to the students in a Resource Room of the school.

6. Support Services - For special and inclusive education to be effective, certain support services should be available to the children as well as to the educators and children's parents. These may be located within the school or in the community, accessible to the family. These are -

- Resource materials for students with SEN and educators
- Transportation for students
- Speech Therapy
- Physical and occupational Therapy
- Counselling for children, parents and educators
- Medical services.

7. Reason for the school system not providing adequate education to the children with disabilities -

- During the training, the general education teachers have not been oriented may adequately to special methods that are required to work with students who have different kinds of needs.

Remedies -

- In an inclusive classroom, all teachers have to be sensitive to students with SEN.
- The educator should break the lesson into interesting and small units and work slowly and patiently with the child who has intellectual disability
- Different skills are required to teach a child with deafness or one with blindness.

8. Disability - According to the World Health organisation (WHO), 'disability' is an umbrella term that covers impairments, limitations in activity and restrictions in participation. Some children are born with a physical, sensory or mental impairment. Some others may develop as disability as they grow that substantially limits them in their daily life activities.

- In academic terms, they are referred to as children with 'disability'.
- In public domain, they are referred to as being 'challenged' or "differently abled":

9. Special Education Methods - There are specific methods and procedures in special education that enable the special educator to teach children with SEN systematically.

- i. First an assessment of the child's / student's level in different areas of development and learning is undertaken for eg. in areas of cognitive development, language development or social skills.

- ii. Based on the assessment report, an Individualized Education Programme (IEP) is developed for each student that is used to guide work with the student.
- iii. Regular evaluation of the IEP is undertaken to determine whether learning and development goals are being met and to check the student's progress.
- iv. All along, access and use of support services (eg. Speech therapy) are facilitated, so that special education has the desirable effect on the student.

10. Knowledge and skills required of personnel in special education-

- i. Understanding one's own beliefs and attitudes to disability - A stereotyped view is that disabled children are less able and hence not qualified for equal rights. We should modify this view and should develop positive attitudes.
- ii. Training in special education helps in understanding children's needs, overcoming the prevailing myth and social stigmas related to their disabilities and developing positive attitudes towards them.
- iii. Developing sensitivity-
 - Special educators are expected to develop sensitivity towards children with disabilities.
 - They should work with the belief that children with disabilities can learn and grow like all children.
 - Special educators should communicate hope to these children and their parents.
 - An attitude of disregard or mere sympathy and charity towards disability should not be shown.
- vi. Knowledge about disabilities - Special educators must have a thorough knowledge about the nature of different disabilities, the development characteristics of children with these disabilities and what associated difficulties or disorders may be present that need attention.

- v. Interpersonal skills - With training, one can acquire communication skills as these would be required to work with children individually as well as in groups.
- vi. Pedagogical skills - The special educator would be required to know the art and science of teaching students termed pedagogy.
 - The educator must know how to break up and simplify the concepts and lessons so that the learners can grasp the principles as well as the meaning.

11. Reasons for increasing need for special educators -

- i. After the persons with Disabilities (PWD) Act 1995 was passed, the need for special educator has been increased both in special and inclusive education.
- ii. Samagra Shiksha (SS) has provision for eight years of education provision for all children including those with disabilities.

12. Special Education Training and various Courses

- i. Rehabilitation Council In India (RCI) - In India all forms of training for professionals and personnel who work in areas related to disability are regulated by the RCI.
 This autonomous body facilitates special education training through several approved institutions throughout the country in packages of certificate, diploma and degree level courses.
- ii. Certificate course in 'Early Childhood Special Education Enabling Inclusion' from Indira Gandhi National Open University (IGNOU) qualifies the candidate to be an early childhood special/inclusive educator. Minimum qualification for this course is class X.
- iii. Bachelor's degree in special education after any graduate degree qualifies a candidate to be an educator in a special/ inclusive school. Such a degree is offered at conventional universities and education universities such as IGNOU, National Institute for the Mentally Handicapped.
- iv. Those who have a Master's degree in fields such as Child

Development, Human Development, Psychology or Social work can enter special education by doing and of the RCI recognized certificate, diploma or degree courses.

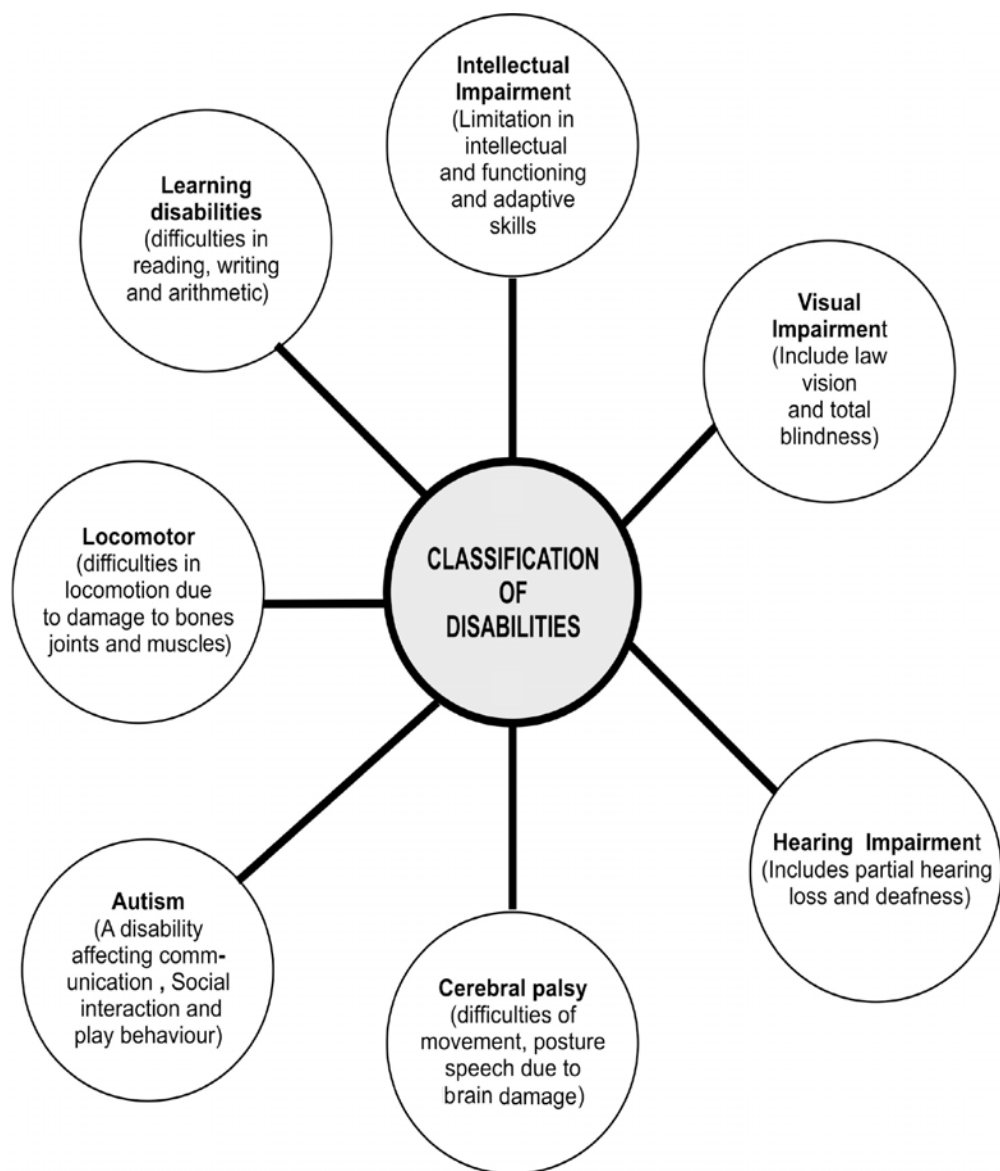
- v. A Master's degree in Disability Studies prepares one for a larger role in the field of disability such as teaching at the university level, research, planning of programmes and setting up one's own organisation.
- vi. Many departments of Child Development under the faculties of Home science at various universities offer courses related to childhood disability Post graduate studies that include the study of children with disabilities prepare the students to work in educational institutions.

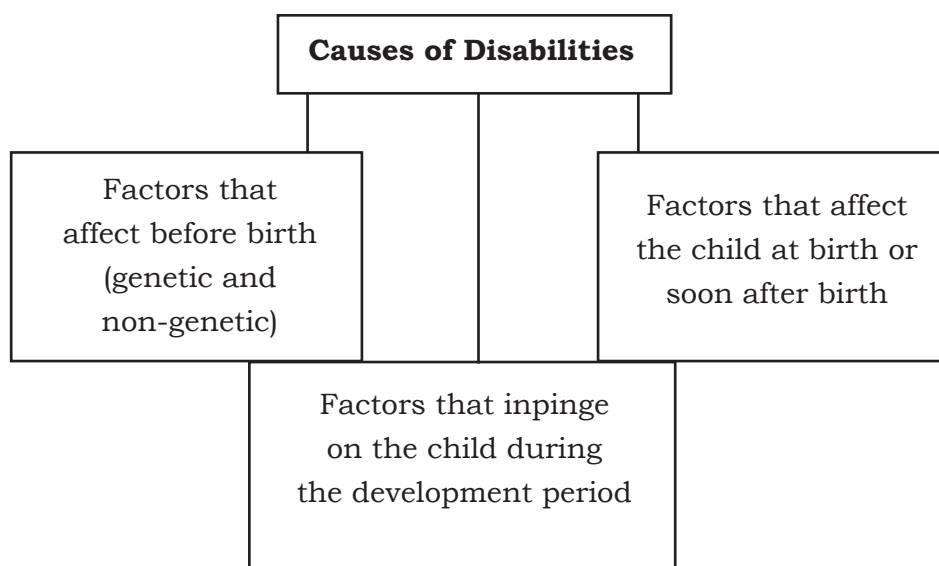
13. Scope related to Special Education -

- i. After class X, one can become an early childhood special educator.
- ii. After courses related to special education, one can organise and conduct one's own enterprise.
- iii. With a few years experience, one can be selected as head of special education programmes at schools.
- iv. One can be manager of special schools.
- v. Non-governmental organisations that follow SSA guidelines too need qualified special educators and master trainers.

Full forms of Abbreviation

- 1. S.E.N. - Special Educational Needs.
- 2. W.H.O. - World Health Organization
- 3. I.E.P. - Individualized Education Program.
- 4. S.S. - Sarv Shiksha Abhiyan Now Samagra Shiksha
- 5. IGNOU - Indira Gandhi National Open University
- 6. P.W.D. - Person with Disability Act
- 7. R.C.I. - Rehabilitation Council of India





OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple Choice Questions.

1. Which term refers to educational provisions for children with special needs."

- | | |
|-----------------------|------------------------|
| a. Special education | b. Inclusive education |
| c. Specific education | d. General education |

Ans. a) Special education

2. What are the reasons of disability?

- | | |
|---------------------------|-------------------------|
| a. Difficulty in learning | b. Difficulty in seeing |
| c. (a) and (b) | d. Ability to walk |

Ans. c) difficulty in hearing and seeing

3. In India, all forms of training for professionals and personnel who work in areas related to disability are regulated by which body.

- | |
|---|
| a. Indira Gandhi National Open University |
| b. Rehabilitation Council of India |
| c. National Institute for the Mentally Handicapped. |

d. Special Education Programme.

Ans. b) Rehabilitation Council of India

4. How many year of education is provided to all children, including children with disabilities under Sarva Shiksha Abhiyan?

- a. 10 years b. 12 years
- c. 8 years d. 16 years

Ans. (c) 8 years.

(B) Match the following

- | | |
|----------------------------|--|
| A. Intellectual Impairment | i) Hearing Loss |
| B. Hearing impairment | ii) difficulty in reading, writing |
| C. Learning disabilities | iii) limited adaptive skills |
| D. Cerebral Palsy | iv) difficulty in movement due to brain damage |

Pick the correct option.

- a. A - ii), B - i), C - iv), D - iii)
- b. A - iii), B - i), C - ii), D - iv)
- c. A - iv), B - iii), C - i), D - ii)
- d. A - iii), B - iv), C - i), D - ii)

Ans. b. A - iii), B - i), C - ii), D - iv)

(C) Fill in the blanks.

1. The special educator would be required to know the art and science of teaching students termed _____
2. Often parents and other members of the child's family require guidance and counselling where, _____ skills would be very useful.
3. An attitude of disregard or mere sympathy and charity towards persons with disability conveys _____ and lack of respect for them.

4. _____ is a disability that affects communication, social interaction and play behaviour.

Ans. 1. Pedagogy 2. Interpersonal 3. Insensitivity 4. Autism

Very Short answer Questions

1. Who provide special education to the children with disability?

Ans. Special Educators.

2. What is inclusive education?

Ans. When children / students with special education needs study in general classrooms with their peers, the arrangement is called inclusive education.

3. What is disability according to the World Health Organization?

Ans. According to the World Health Organisations (WHO), 'disability' is an umbrella term that covers impairments, limitations in activity and restrictions in participation.

4. What do you understand by Special Education ?

Ans. Special Education means specially designed instruction for children in all settings such as classroom, home, workplace, public places, the street and the rehabilitation homes.

Case Study based questions (1 mark × 4)

There are children who may have unusual difficulty in walking, playing, talking, seeing and hearing, in interacting socially or in doing what one may consider usual. They are likely to have disabilities, due to certain conditions such as hearing impairment, visual impairment, or intellectual impairment. In order to learn, work and experience the world optimally they have to try harder and people around them have to enable them in their endeavour.

1. What is special education for handicapped students
- a. Segregated education b. Exclusive education
 - c. An approach that facilitates their learning
 - d. a) and b)

Ans. c) an approach that facilitates their learning

2. Some Children who have severe difficulties may benefit greatly from being educated in a classroom prepared exclusively for them. Why?
- a. Because there are smaller number of students grouped together
 - b. Because the educator interacts with the students on a one-to-one basis
 - c. (a) and (b) both
 - d. Because special children want to remain aloof.

Ans. c) (a) and (b) both

3. What are the needs of special children?
- a. Educational needs
 - b. Physical needs
 - c. Recreational needs
 - d. (a) and (b)

Ans. (d) educational and physical needs (a) and (b) both

4. Which the following statements is incorrect?
- a. Children with special needs do not have to always study in separate institution.
 - b. Special educators provide special education.
 - c. Students with diverse needs are placed together in age appropriate classes such that the students can optimally achieve their learning potential.
 - d. Handicapped students should be separated from normal children.

Ans. d) Handicapped children should be separated from normal children.

Short answer questions (2 marks)

1. Our school system is not quite equipped to provide education to children with disabilities. Why?

Ans. The primary reason is that during the training general education teachers may have not been oriented adequately to special methods that are required to work with students who

have different kind of needs.

2. What guidelines are there for teachers in an inclusive classroom?

- Ans.** i. In an inclusive classroom, teachers have to be sensitive to students with SEN.
ii. Teacher should make lesson interesting.
iii. The teacher should break the lesson into small units.
vi. The teacher should work slowly and patiently with the child.

3. The need for special educators and other personnel in education. programmes both in special and inclusive education settings has been increasing over time. Why? Give 2 reasons.

- Ans.** i. The need for special educators has increased after the persons with Disabilities (PWD) Act 1995 was passed.
ii. Sarva Shiksha Abhiyan (SSA) now Samagra Shiksha has provision for eight years of education for all children including those with disabilities.

4. Write about the Education scope related to special education.

- Ans.** i. After class X, one can become an early childhood special educator.
ii. can become head of special education programmes.
iii. can become manager of special schools.
iv. can become special educators and master trainers in Non-governmental organisation.

Short answer questions (3 marks)

1. In what three categories can the cause of disability be categorized?

- Ans.** The Causes of disability can be grouped under three categories
i. Factors that affect before birth, both genetic and non-genetic.
ii. Factors that affect the child at birth or soon after birth.
iii. Factors that impinge on the child during the development period.

2. For special and inclusive education to be effective, which support services should be available to the children, educators and parents?

Ans. Support services

- i. Resource materials for students with SEN and educators.
- ii. Transportation for students
- iii. Speech Therapy
- iv. Physical and occupational Therapy
- v. Counselling for children, parents and educators.
- vi. Medical services.

Long Answer Questions (4 marks)

1. Briefly explain the specific methods and procedures in special education that enable the special educators to teach children with SEN systematically.

Ans. Refer to Points to Remember Number-9

2. Who are called disabled children? How disabilities can be classified?

Ans. Some children are born with a physical, sensory or mental impairment. Some others may develop a disability as they grow that substantially limits them in their daily life activities. In academic terms they are referred to as children with disability. In the public domain they referred to as being challenged or differently abled".

Classification of disabilities -

- i. Intellectual impairment (limitation in intellectual functioning and adaptive skills).
- ii. Visual impairment - (includes low vision and total blindness)
- iii. Hearing impairment (includes partial hearing loss and deafness)
- iv. Cerebral palsy- (difficulties of movement, posture, speech and hand functions due to brain damage)
- v. Autism - (a disability affecting communication, social interaction and play behaviour)
- vi. Locomotor disability (difficulties in locomotion due to damage to bones, joints and muscles)
- vii. Learning disabilities (difficulties in reading writing and arithmetic)

Long Answer Question (5 marks)

1. What do you understand by inclusive education. What is the

philosophy behind this approach ? Briefly explain several models of special /inclusive education.

Ans. When children / students with SEN study in general classrooms with their peers, the arrangement is called 'inclusive education'.

The philosophy that guides this approach is -

- i. Students with diverse needs (educational, physical, social and emotional) are placed together in age appropriate classes/ groups such that the students can optimally achieve their learning potential.
- ii. The school makes suitable adjustments and modifications in its curriculum, teaching methods and physical set up to facilitate their education.

Models of special /inclusive education

- iii. Some schools impart education exclusively to children with disabilities like intellectual impairment, cerebral palsy or visual impairment by special educators
 - iv. Inclusive Education - An inclusive school has facilities for children with special educational needs and are placed with other students in regular classrooms. In this system, the special educators provide pedagogical support to the regular teachers.
 - v. Integrated Education - emphasises placement of children with disability in mainstream school. The special educator then co-ordinates work with regular teachers and provides extra inputs to the students in a Resource Room of the School.
2. Explain various knowledge and skills required of personnel in special education.

Ans. Refer to Points to Remember Number-10

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple Choice Questions

1. Disabled PWD Act passed for which children?
 - a. For general children
 - b. For handicapped children.
 - c. For rural children
 - d. For urban children.
2. What is full form of PWD?
 - a. Person with Disabilities
 - b. Person with Difficulty in Speaking
 - c. Person with general public.
 - d. Person with Manpower.
3. What difficulties are faced by children with learning disabilities?
 - a. Difficulty in reading
 - b. Difficulty in writing
 - c. Difficulty in running
 - d. a) and b)
4. What is the minimum educational qualification to undertake a Certificate Program in Inclusion Early Childhood Special Education supported by Indira Gandhi National Open University?
 - a. X class pass
 - b. XII class pass
 - c. VIII class pass
 - d. V class pass

(B) Match the following

- | | |
|-------------------------------------|---------------------------------|
| A. First step of special education | i) Develop education programme |
| B. Second step of special education | ii) Evaluation of development |
| C. Second step of special education | iii) Use of support Service |
| D. Fourth step of special education | iv) Assessing students Progress |

Pick the correct option.

- a. A - ii), B - i), C - iv), D - iii)
- b. A - iv), B - iii), C - ii), D - i)
- c. A - iii), B - i), C - iv), D - ii)

- d. A - ii), B - iv), C - i), D - iii)

(C) Fill in the blanks

1. Person with Disability Act was passed in the year _____
2. In the public domain children with disability are referred to as being _____ or differently abled.
3. In _____ children have difficulty in movement, posture, speech and hand functions due to brain damage.
4. In an inclusive classroom, all teachers have to be _____ to students with Special Education Needs.

Very short answer Questions

1. What do you understand by special education ?
2. What should a teacher do if a child has an intellectual disability?
3. Define 'disability' according to WHO?
4. What do you understand by Hearing impairment ?

Case Study based Questions (1 Mark × 3)

Most of us 'construct' our beliefs about social phenomena, such as gender and social class, based on our own experiences as well as the beliefs of other significant people who influence us such as our parents. Hence, it is important to reflect and become aware how one view's children with disability. Does one have a stereotyped view that they are less able and hence not qualified for equal rights? If we understand our own prejudices it becomes easier to modify them and develop positive attitudes.

6. What helps in developing positive attitude towards persons with disability?
 - a. Training in special education
 - b. Understanding children's needs.
 - c. a) and (b)
 - d. belief in social stigma
2. The _____ would be required to know the art and science of teaching students, termed pedagogy.
 - a. Special educator
 - b. Director
 - c. Manager
 - d. Sports teacher

or

All forms of training for professionals who work in areas related to _____ are regulated by the Rehabilitation Council of India.

- | | |
|------------------------|--------------|
| a. Disability | b. Sports |
| c. Cultural activities | d. Academics |

3. In _____ disability a person has difficulty in locomotion due to damage of bones, joints and muscles.

- | | |
|-------------------------|------------------------|
| a. Visual impairment | b. Autism |
| c. Locomotor disability | d. Learning disability |

or

_____ includes low vision and total blindness.

- | | |
|----------------------------|----------------------|
| a. Intellectual impairment | b. Visual impairment |
| c. Hearing impairment | d. Autism |

Short Answer Questions (2 marks)

1. Give 2 reasons of disability.
2. Sumit is different from normal children. What are the four reasons for it?
3. What are the stereotyped views that people have for persons with disability ?

Short Answer Questions (3 marks)

1. Where support services should be given? What type of support services should be provided?
2. Explain 3 models of special/inclusive education.

Long Answer Questions (4 marks)

1. Sumit is very sensitive towards people with disability and wants to help them and work with them. Apart from sensitivity, What other 4 knowledge and skills are required in this field ?
2. Who are special educators ? How they can help children with disability ?

Long Answer Questions (5 marks)

1. Briefly discuss the courses and training for career in special and inclusive education.
2. What are the special teaching methods? Explain.

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9. MANAGEMENT OF SUPPORT SERVICES, INSTITUTIONS AND PROGRAMMES FOR CHILDREN, YOUTH AND ELDERLY

‘POINTS TO REMEMBER’

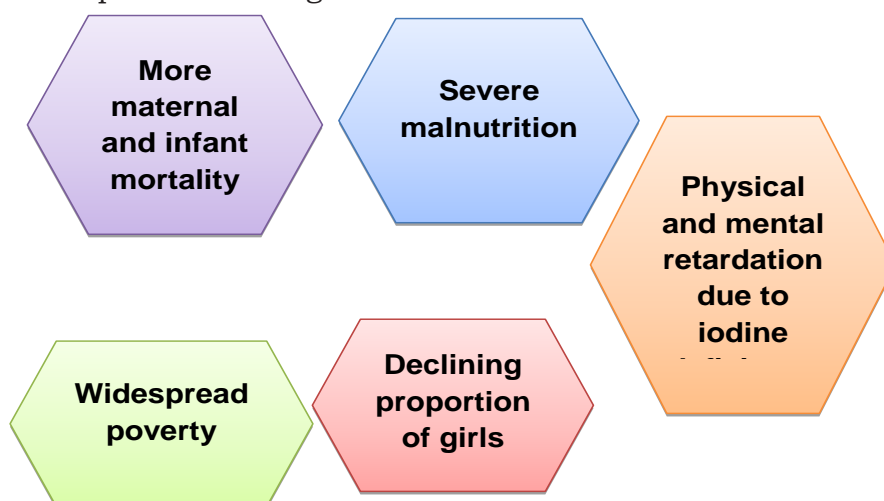
1. Why is there a need for support services, institutions and programmes for children, youth, and the elderly?

- i. The family is the basic unit of society. One of its main functions is to take care of the needs of its members, such as the need for formal education of children, the need for skills training for youth jobs, and the need for support and health care for the elderly.
- ii. Community builds schools, hospitals, universities, recreation centres, training centres, etc., which provide specialized services or support services, by which various members of the family get an opportunity to fulfill their needs.
- iii. Many families in our country are unable to access the basic services of their members and/ or access the various services provided by other systems of society, due to various reasons, especially due to lack of financial resources. Due to this many children, young and old people are separated from their families and live in challenging situations.
- iv. Many vulnerable children and youth face various difficulties including hunger, malnutrition, limited access to education or medical facilities, violence, discrimination and exclusion. The elderly often face illness, disability and economic dependence on their family members.

2. Barriers to access to support services in our country

- i. India has widespread poverty, and the country has one third of the world's poor.
- ii. Childbirth assistance by less trained midwives, which is the cause of high maternal and infant mortality rate.
- iii. Less than half of the country's households eat iodized salt. Iodine deficiency adversely affects the mental and physical growth of the child.

- iv. A sense of discrimination against girls and women, which is reflected in many adverse indicators, including nutritional and educational outcomes, and a declining proportion of girls, especially in the youngest age group, as compared to boys.
- v. Nearly two-thirds of children under the age of five suffer from moderate or severe malnutrition. Malnutrition affects the development of all regions.

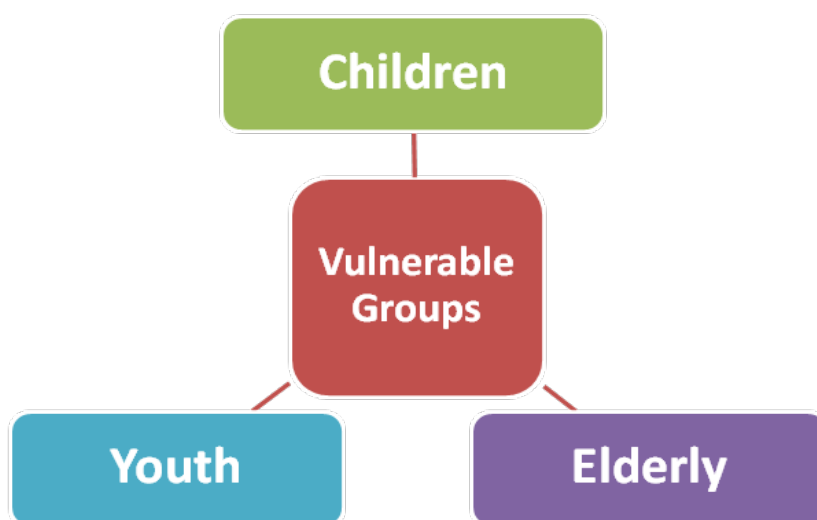


- For such families, or the members who are in challenging and difficult circumstances, the state/society has to step in and make efforts to look after the needs of its members. This is also possible through the efforts of the private sector and / or non-governmental organizations.
- It is the responsibility of the government and society to ensure that all citizens have a decent life, and children and youth have opportunities for holistic development in a healthy and stimulating environment.

3. Vulnerable Groups

The term vulnerable refers to those individuals / groups in the society who are more likely to be affected by adverse conditions and to whom

adverse conditions may have a more damaging effect.



4. What makes Children, Youth and Elderly vulnerable?

If the requirements of a person are not fulfilled in daily life, then that person becomes vulnerable.

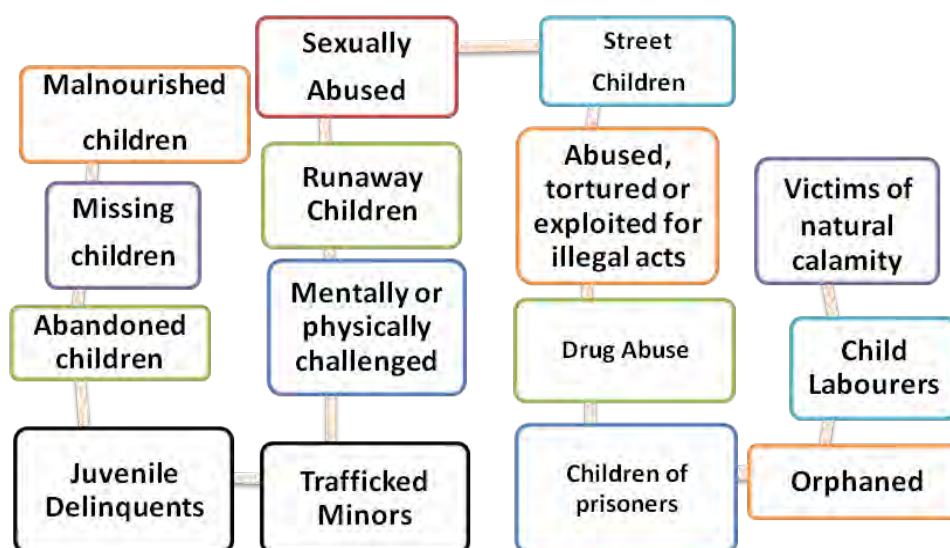
5. Why are children vulnerable?

- i. Children are vulnerable, because childhood is a period of rapid development in all areas and development of one area affects the development of all other areas.
- ii. For the overall development of children, it is important that their needs of food, shelter, health, care, love, rearing are met in a holistic manner. Adverse experiences can have a lasting impact on the development of the child.
- iii. All children are vulnerable, but some children are more vulnerable than others. These are children who live in such challenging conditions and difficult conditions that their basic needs for food, health, care, and nurturance are not met.
- iv. All children living in difficult circumstances require special care and protection.

6. Reasons of non-fulfilment of requirements of large proportion of child population in our country–

- A large number of children under the age of five are malnourished. Malnutrition greatly affects their development.
- About 30 lakh children live on the roads without any shelter.
- Only one in three pre-school children gets an opportunity to participate in elementary education.
- In India, less than half of the children between the age of 6-14 years go to school.
- Only one-third of the children enrolled in Class I reach Class VIII, leaving school for some reason or the other.
- According to official estimates in India, 17 crore children work. According to the World Bank, their actual number can be up to 44 crores.

7. Which children are vulnerable -

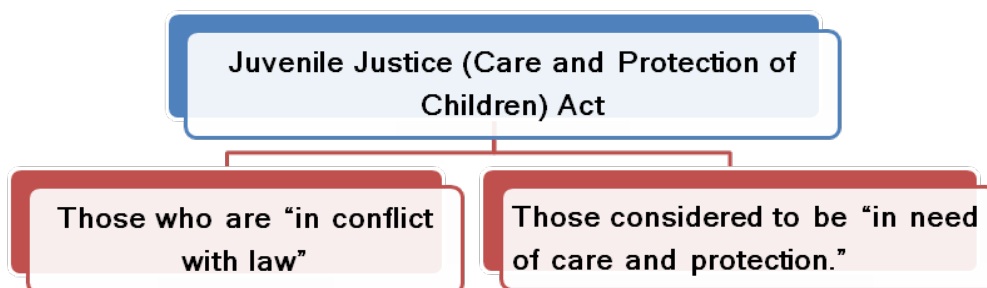


8. The Juvenile Justice (Care and Protection of Children) Act, 2000 and the Juvenile Justice (Care and Protection of Children) Act, 2015

- The Juvenile Justice (Care and Protection of Children) Act, 2000 was the primary legal framework of justice for adolescents

in India. This was replaced by the Juvenile Justice (Care and Protection of Children) Act, 2015.

- ii. The Act is concerned with two categories of children–
- Those who violate the law and
 - Those who need care and protection.



- iii. Children “in conflict with law” (also called juvenile delinquents) are those who have been caught by the police for violating the Indian Penal Code. In other words, they are arrested by the police because they have committed/ are accused of a crime.
- iv. It relates to ‘juveniles in conflict with law’ and ‘children in need of care and protection’, by providing for proper care, protection, and treatment, by catering to their development needs.
- v. The Act provides for adopting a child-friendly approach in the adjudication and disposition of matters in the best interest of children and for their ultimate rehabilitation through various institutions.
- vi. This Act is in compliance with the Child Rights Convention and according to this Act, the identified children in need of care and protection are–
- Those who do not have home or a fixed place or shelter or have no means of sustenance. These include abandoned children, street children, runaway children, and missing children.
 - Those who live with a person (guardian or someone else) who is unsuitable to control the child or where the child is likely to be killed, abused, or neglected by the person.
 - Children who are mentally or physically challenged, ill or

suffering from any prolonged illness or incurable disease and have no one to care for or support them.

- Those who are abused, tortured, or punished for sexual misconduct or immoral acts.
- Those who are vulnerable to drug addiction or their trafficking.
- Those who are victims of armed conflict, civil commotion, or natural calamity or disaster,
- Those who are likely to be abused for unfair advantage. These include abandoned, orphans, trafficked minors rescued from red-light area, child labourers rescued from factories, lost, runaways, children with special needs and children of prisoners.

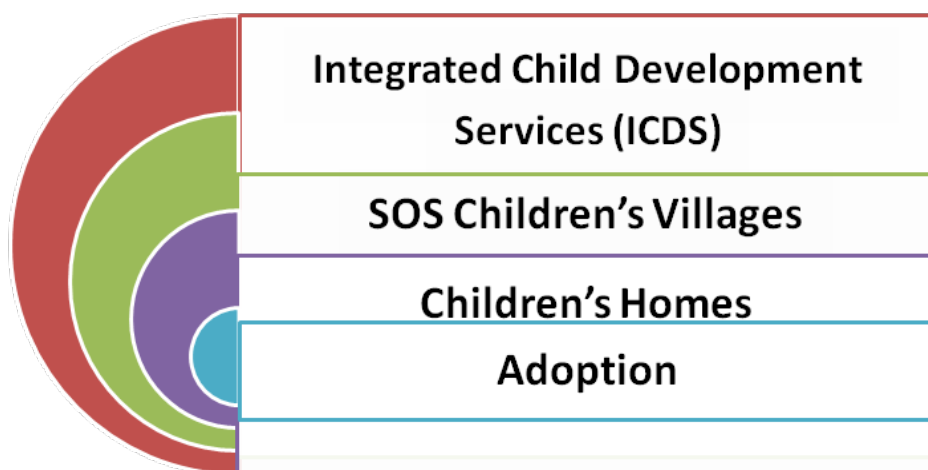
9. Juvenile Justice (Care and Protection of Children) Act - 2015

This new Act allows a 16 to 18-year-old juvenile who commits a 'heinous crime' to be prosecuted in the same way as an adult. Under Juvenile Justice Act, 2000, it was not possible to prosecute any juvenile below the age of 18 years.

The Act also includes the qualification of parents for adoption and the method of adoption.

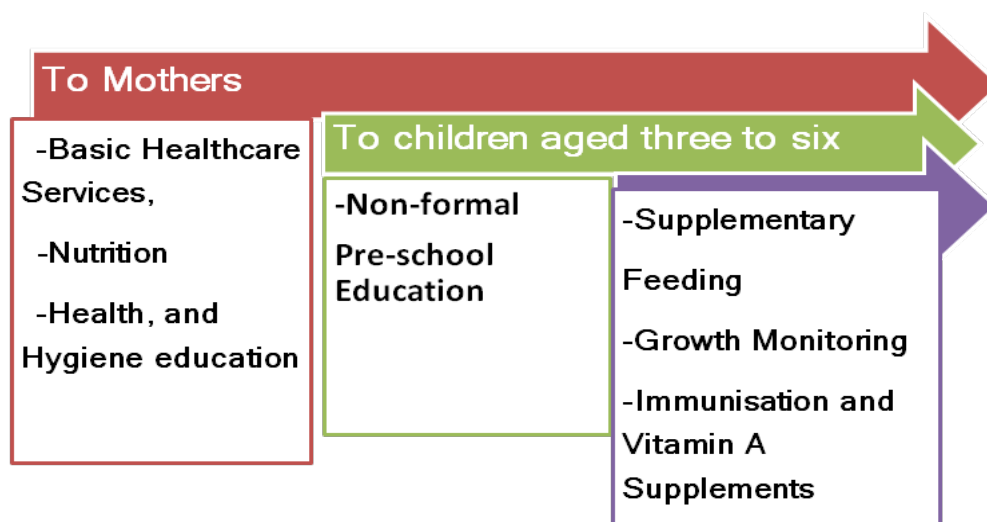
10. Institutional Programmes and Initiatives for Children

Several programs and various services are being provided by the government and non-governmental organizations in the country to cater to the needs of sensitive children.



i. Integrated Child Development Services - (ICDS)

- Objectives –
 - To meet the health, nutrition, stimulation and early learning /education needs of children below six years of age in an integrated manner to promote their development.
 - Basic healthcare services and nutrition for pregnant and lactating mothers
- It is the world's largest Early Childhood Program. Currently 41 crore children are benefiting from this program. These services are provided in an integrated manner at a care centre called Anganwadi. (Figure 9.1)



ii. SOS Children's Villages

- This is an independent non-governmental social organisation which has pioneered a family approach to the long-term care of orphaned and abandoned children.
- SOS villages have the purpose of providing family-based, long-term care to children who do not live with their biological families for any reason.



- In each SOS home there is a 'mother' who looks after 10-15 children. This unit lives like a family and the children experience relationships and love once again, which helps children to recover from traumatic experiences.
- They grow up in a stable family environment and are supported individually until they become independent young adults.

In India, the first SOS village was set up in Faridabad in 1964. Now, in the year 2019-20, the organization takes care of about 6700 needy/abandoned children in 32 specific villages across the country.

Whenever India has experienced unrest or environmental and natural disasters like the toxic gas accident of 1984 in Bhopal, or devastating cyclones, catastrophic earthquakes as well as Tsunami, the SOS Children's Villages provided immediate assistance through emergency relief programmes.

- The SOS families live together, forming a supportive ‘village’ environment. They are integrated with the local community and contribute to the social life.

iii. Children's home-

- Three types of houses have been set up by the government for 3–18-year-olds, which are in the periphery of the state due to various reasons.
- It is the responsibility of the government to provide them with home, boarding, education, and vocational training, so that they will be able to become productive/ useful members of the society. Most of these are run by the home government in partnership with non-governmental organizations.

These are as follows:—

Observation Homes	Special Homes	Juvenile/ Children's Homes
<ul style="list-style-type: none"> • where children stay temporarily till the completion of an investigation to track down their parents and collect information on their family background 	<ul style="list-style-type: none"> • where juveniles (children under 18 years of age) found guilty in terms of violation of law, are placed in custodial care 	<ul style="list-style-type: none"> • where children whose families are not traceable, or are unfit/ dead or simply unwilling to take the child back stay.

iv. Adoption—

- Adoption means a legal process that allows someone to be the parents of a child, even if they do not have blood relations among themselves.
- The tradition of child adoption in India is quite old. Now the practice of adopting children from outside the family has been made institutional and legal.
- While the Government of India and the State Governments provide the necessary support and guidance through policies

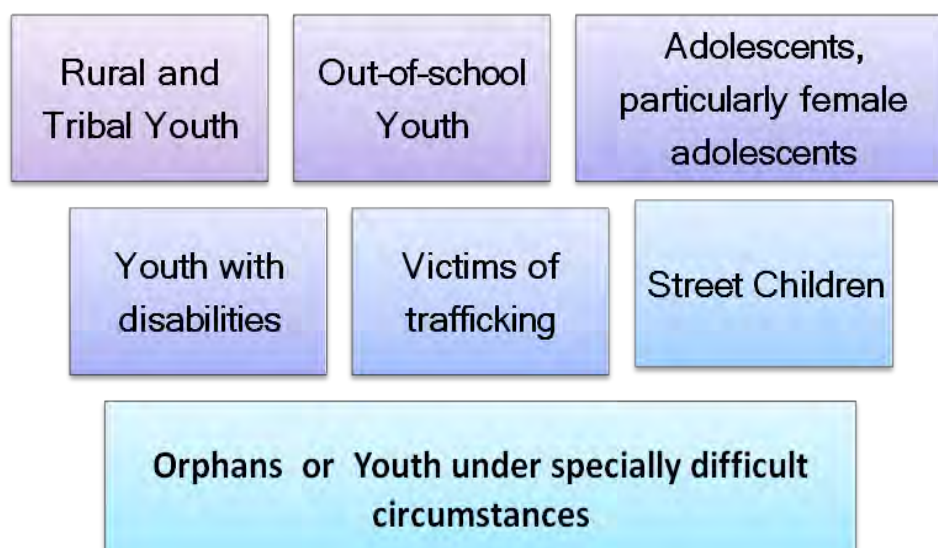
and programs, non-governmental organizations (NGOs) provide the necessary delivery system for the adoption process.

- The Government of India has set up a Central Institution, Central Adoption Resource Authority (CARA) under the advice of the Supreme Court which makes guidelines for adoption also monitors and regulates them to protect the welfare and rights of Indian children.

10. Who are the 'Youth'?

- i. In the National Youth Policy-2003, 'Youth' was defined as a person aged 13-35. These youth were further subdivided into two broad subgroups: 13-19 years old (called adolescents) and young adults aged 20-35 years.
- ii. According to the new National Youth Policy, 2014, 'Youth' is defined as persons aged between 15 to 29 years.
- iii. Youth is the period when a person prepares to play the role of an adult; The two most important roles during this period are earning a livelihood and marrying and starting a family life.
- iv. Our national progress depends primarily on how youth are encouraged and nurtured for the growth of the nation and are able to contribute to socio-economic development.

11. Which Youth are Vulnerable?



12. Why are Youth Vulnerable?

- i. Youth is a vulnerable period for many reasons. During this period, a person tries to reconcile the many biological changes that occur in his/her body, which have an impact on the person's health and sense of identity.
- ii. Constant peer pressure and pressure to improve are other factors.
- iii. As a result, some adolescents start consuming alcohol or drugs because the family / environment is not being able to provide positive support to adolescents.
- iv. Youth face many risks related to sexual and reproductive health and many people are not properly aware of the right options for sexual and reproductive health.

13. What are the needs of the youth?



14. Youth Programmes in India

The National Youth Policy was adopted by the Ministry of Youth Affairs

and Sports in 2003, the new National Youth Policy was implemented in the year 2014.



15. National Service Scheme (NSS)

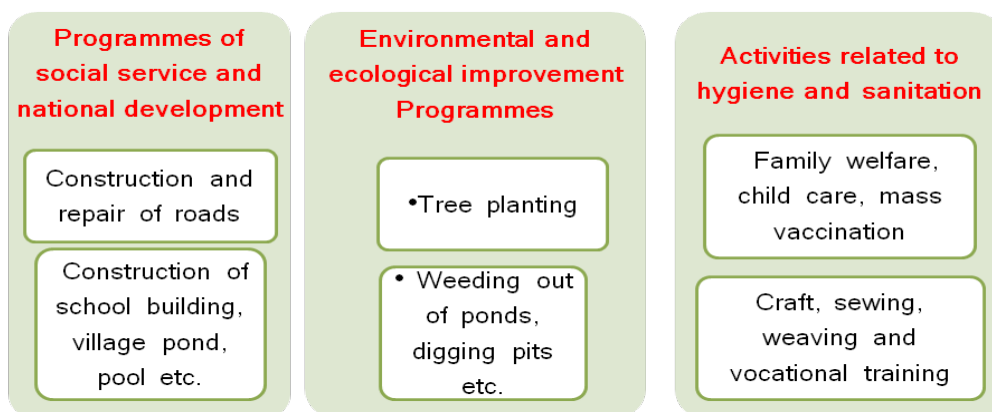


- i. (i) The National Service Scheme (NSS) is a central sector scheme of the Ministry of Youth Affairs and Sports, Government of India.
- ii. (ii) It provides an opportunity to young students from class 11 and 12, from schools, undergraduate and postgraduate students from technical institutions, colleges and universities, to participate in various community service activities and programmes being run in India by the Government. (Figure 9.2)

Objective— NSS's sole objective is to provide experience to young students in providing community service. The students of National Service Scheme also provide assistance to local authorities for implementation of various relief and rehabilitation programmes for the

economically and socially weaker sections of the society.

Activities for students under National Service Scheme (NSS)



16. The National Service Volunteer Scheme and Nehru Yuva Kendra Sangathan

- Nehru Yuva Kendras were established in 1972 with the objective of providing opportunities for rural youth to participate in the process of nation building as well as development of their personality and skills.
- In the year 1987-88, the Nehru Yuva Kendra Sangathan (NYKS) was established as an autonomous body under the Ministry of Youth Affairs and Sports. It is the largest grassroots voluntary organization of its kind in the world.
- There are two types of objectives of Nehru Yuva Kendra Sangathan:-
 - Involving rural youth in nation building activities



- Develop skills and values in them so that they become responsible and creative citizens of a modern, secular and technological nation.
- iv. It gives the right direction to the youth of 13-35 years of age based on the principles of voluntarism, self-help, and community participation.

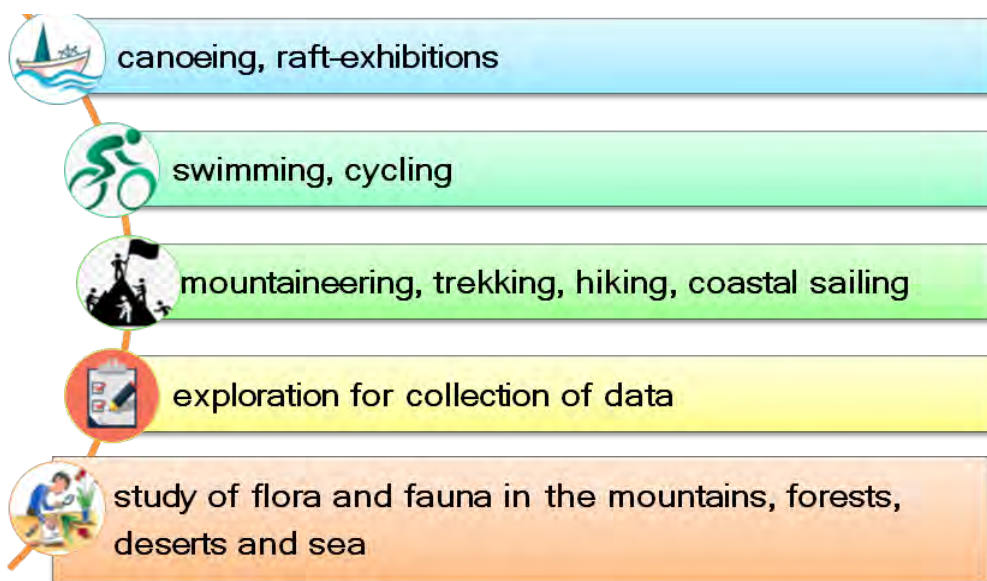
Various activities for students under Nehru Yuva Kendra Sangathan (N.Y.K.S.)



- v. These activities are organized for the out of school youth with the following objective:
- To make them self-reliant i.e., functionally competent, economically productive, and socially useful.
 - Make them literate and develop mathematical skills.
 - To improve their work capacity and to make them aware of their growth prospects.

17. Promotion of Adventure

- i. Many youth clubs and voluntary organisations organise various activities using the financial assistance provided by the government for the promotion of adventure, which are as follows-



- ii. These activities are aimed at encouraging the youth to develop courage, risk-taking, collaborative teamwork, ability to read and develop tolerance for challenging situations.

18. Promotion of National Integration

- i. Financial assistance is provided by the Government to several voluntary institutions to arrange for the youth living in one region to visit other states with a lot of cultural concerns, thereby developing a greater understanding of the historical and cultural heritage of the country, the difficulties faced by people from different regions and surroundings, social customs of other parts of the country, etc.
- ii. Camps, seminars/conferences etc. are also organized to promote national integration.

19. Scouts and Guides

- i. The government provides financial assistance for training of scouts and guides, organizing rallies and jamborees etc.
- ii. Objective-
 - To develop the character of boys and girls by fostering loyalty, patriotism and a sense of being considerate towards others.
 - Promote physical and mental development as well.
 - Developing a spirit of social service.



20. Commonwealth Youth Programme

- i. Objective-
 - To provide a platform for the youth to participate in the development processes of their countries and to enhance cooperation and understanding in the Commonwealth countries.

Three regional centres were established for advanced studies in youth work. The Asia Pacific Regional Centre was established in Chandigarh, India.

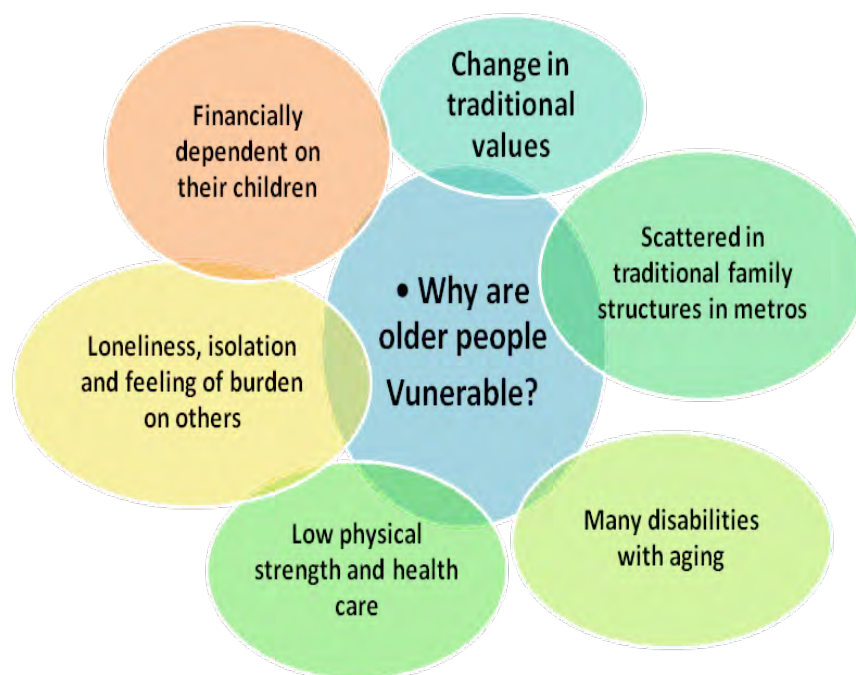
21. Characteristics of population of Elderly in India

- i. In many countries, senior citizens are persons 65 years of age or more. In India, persons aged 60 years, or more are considered as senior citizens.
- ii. Population of elderly in India is continuously increasing-
 - Life expectancy which was 29 years in 1947 increased to 67.9 years in 2011.

- India is second only to China in the population of senior citizens.
- Majority of these about 80 percent live in rural areas.
- Increase in the number of women in the elderly population.
- Increase in the number of old persons (above 80 years of age)
- About 30 percent of senior citizens are living below the poverty line.

22. Why are elders a vulnerable group?

- Poor health-Many diseases and disabilities with aging such as-
 - Blindness due to vision impairment and cataract.



- Deafness due to nervous disorder,
 - Trouble in walking due to arthritis and a general inability to take care of oneself.
- The pain of loneliness- a period in the family life cycle when children are married or turned away from the family to earn

their livelihood, feel like a feeling of separation or a burden on others or experience loneliness.

- iii. The stress of being financially dependent on your children.

23. The reason for the lack of proper care for the elderly

- i. There is fragmentation of the traditional family network– Certain features of city life (small family size, nuclear families, lack of free time to care for the aged, limited living space, high cost of living, long working hours), lead to reduced support within the immediate and extended family.
- ii. Changes in traditional values.
- iii. Sometimes concepts like privacy, space, independence, materialism, focus on self are also responsible for the inability to adequately care for the elderly. Thus, many older persons live alone at a time when family support is more essential for them.

24. Some programs for the elderly

- i. The government adopted the National Policy for Older Persons in 1999.
- ii. The elderly should be treated as human resources and their extensive experience and remaining capabilities should be optimally utilized for the development of the nation. The government should also ensure their ability to live healthy and meaningful lives.
- iii. National Old Age Pension Scheme (NOAPS) This scheme was renamed as Indira Gandhi National Old Age Pension Scheme (IGNOPS) in the year 2007.
 - It is for the elderly who are either destitute or belong to a family below the poverty line.
 - Earlier, the age of senior citizens to participate in old age pension scheme was 65 years, which has been reduced to 60 years in the year 2011.
 - Now the beneficiaries must be 60 years or more and have their age certificate and proof of being destitute. (Figure 9.3)

iv. Some programs being run for the elderly in the country-

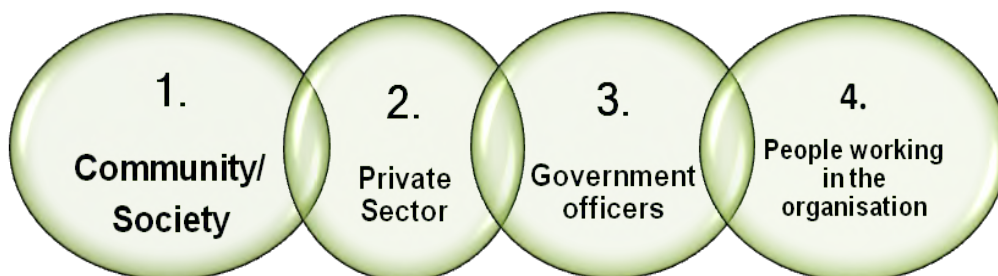
	• Mobile medical care units for the elderly living in rural and remote and backward areas.
	• Developing and strengthening inter-generational relationships, especially between children/ youth and the elderly.
	• Food, shelter and health care for abandoned elderly
	• Multi-service centers for the elderly who provide them with day care education, entertainment, companionship and health care.
	• Program to awaken sensitivity in children of school and colleges.
	• Training and awareness programs for caregivers of the elderly.
	• Respite Care Homes for elderly people who are seriously ill
	• Old Age Homes to provide food, care and shelter
	• Research advocacy and awareness.
	• Mental health care and specialized care for the elderly such as disability and hearing aids / devices
	• Indira Gandhi National Old Age Pension Scheme (IGNOAPS)
	• Physiotherapy Clinic Physiotherapy Center
	• Assistance and Counseling Center for the Elderly
	• Day care center (daily care center) for patients with Alzheimer's disease/dementia)

25. Preparing for career

- i. Career/employment in the management of institutions and programmes for children, youth and the elderly requires the capabilities and skills of a planner, manager and supervisor, to work as an in-charge or manager in an already running program/institution.
- ii. As a career/employment option, entrepreneurs can also take initiative to set up an organisation/programme for youth, children, or elderly people. For which, the needs of the target group and methods of care should be fully known.
- iii. Comprehensive knowledge of career and development of many skills and abilities.



26. People Skills-Running or working in an organisation means that one has to interact with people from different backgrounds working in different positions.



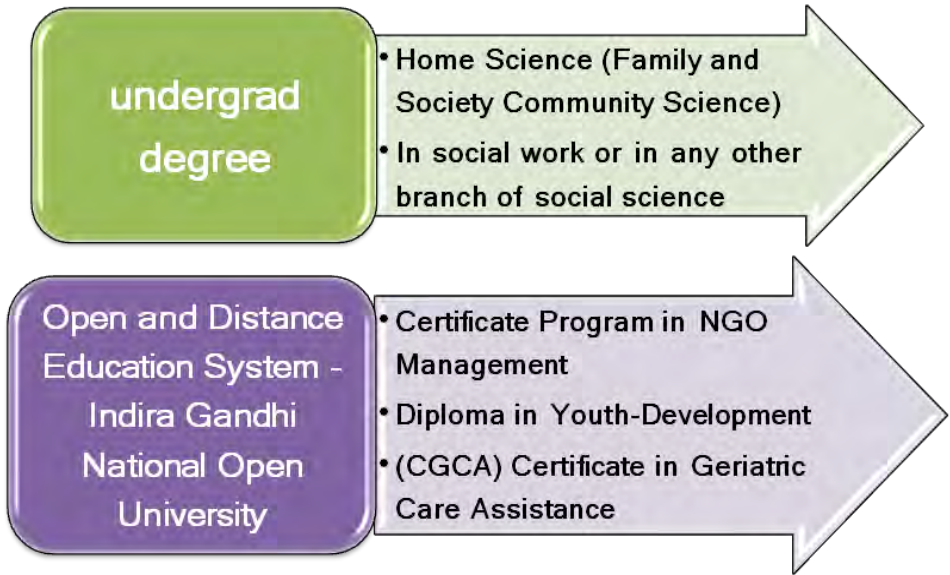
- i. Community/ Society- A program or institution for children will be successful only if there is a feeling of adopting or joining it in the society. Planning, management, and implementation with participation are the pillars of an effective programme.
- ii. Private Sector-Private sector financial institutions, companies, and organizations to support life/ innovation programmes.
- iii. Interactions or negotiations with government departments may be required for various tasks or functions.
- iv. Individuals working in the organisation - The relationship between the beneficiary and the working person is cordial and is important for the success of an organisation.

27. Administrative skills –

A fundamental understanding of each issue must be there in running or managing an organisation or programme.



28. Study programmes/ courses to enter the employment market of the region



29. Scope/ Career Avenues

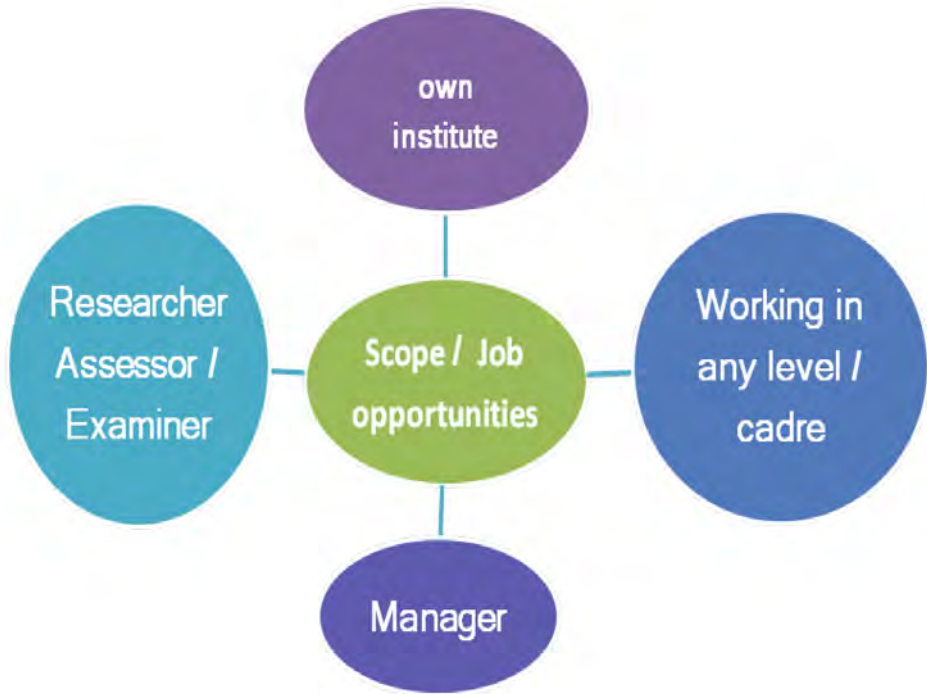




Figure 9.1 Integrated Child Development Services - (ICDS)



Figure 9.2 National Service Scheme (NSS)



Photo Credit- Rahul Dev

Figure 9.3 Indira Gandhi National Old Age Pension Scheme (IGNOAPS)

Full names of abbreviations

1	JJ Act	Juvenile Justice (Care and Protection of Children) Act
2	CRC	Convention on the Rights of the Child
3	ICDS	Integrated Child Development Services
4	NGO.	Non-Government Organisation
5	IPC	Indian Penal Code
6	CARA	Central Adoption Resource Authority
7	NYP	National Youth Policy
8	NSS	National Service Scheme
9	NYK	Nehru Yuvak Kendra
10	CYP	Commonwealth Youth Programme
11	NOAPS	National Old Age Pension Scheme
	IGNOAPS	Indira Gandhi National Old Age Pension Scheme
12	IGNOU	Indira Gandhi National Open University
13	MYAS	Ministry of Youth Affairs And Sports

OBJECTIVE QUESTIONS (1 MARK)

(A) Multiple choice questions

- What do children who indulge in illegal activities and who are arrested by the police for violating the Indian Penal Code known as?
 - Smuggled minors
 - Juvenile delinquent
 - Abandoned children
 - Young rebels

Answer- b) Juvenile delinquent

- Why was the Central Adoption Resource Institute (CARA) formed?
 - To provide immediate assistance through emergency relief programmes
 - To provide positive support to the adolescents
 - To develop skills and impart vocational training among children
 - To facilitate and strengthen adoption rules

Answer- d) To facilitate and strengthen the adoption rules

3. Under which programme do youth clubs or volunteer organisations organise activities such as study of flora, fauna of the mountains, forests, deserts, and seas?
 - a. Promotion of adventure
 - b. Promotion of national integration
 - c. National Discipline Scheme
 - d. Commonwealth Youth Programme

Answer- a) Promotion of adventure

4. What should be the minimum age of the beneficiaries in Indira Gandhi National Old Age Pension Scheme (IGNOAPS)?
 - a. 60 years or more
 - b. 62 years or more
 - c. 65 years or more
 - d. 68 years

Answer- a) 60 years or more

(B) Match the following

- | | |
|---|-----------|
| A. New Juvenile Justice (Care and Protection of Children) Act | i) 1999 |
| B. First S.O.S. Village in India | ii) 2014 |
| C. New National Youth Policy | iii) 1964 |
| D. National Policy for Older Persons | iv) 2015 |

Pick the correct option-

- | | |
|---------------------------------------|---------------------------------------|
| a. A - iii), B - iv), C - i), D - ii) | b. A - iv), B - i), C - iii), D - ii) |
| c. A - ii), B - iv), C - i), D - iii) | d. A - iv), B - iii), C - ii), D - i) |

Answer - d) A - iv), B - iii), C - ii), D - i)

(C) Fill in the blanks

1. Each S.O.S. house has a 'mother' who takes care of_____.
Answer- 10-15 Children
2. _____ have been established by the Government where juveniles (children under the age of 18 years) who violate the law are kept under custodial care Answer- Special Home
3. The students of _____ help in the implementation of various relief and rehabilitation programmes for the economically and socially weaker sections of the society. Answer- National Service Scheme

4. India ranks second in the population of senior citizens after _____. Answer: China
5. After taking ----- in home science or social work, you can take a job in an institute or programmes for the elderly/ youth.
Answer - Undergraduate Degree

(D) Picture Based Questions -

1. Identify the picture and state which organization does this logo belong to, and which vulnerable group is it committed to support?



Answer: SOS Children's Village; Orphans /Needy/ Abandoned children

2. Identify the picture and state, what is this event called?



Answer- Jamboree/ Scout and Guide Assembly, Training Rally

(E) Very short answer question-

1. State any two programs organized by the government for youth to promote national integration.

Answer: Camps, excursion programs, seminars / conferences (any other, any two)

2. Name any two 'vulnerable' groups.

Answer: Children, youth, elderly (any two)

3. According to the new National Youth Policy-2014, which age group has been considered as youth?

Answer- 15-29 years

4. Write one of the objectives of the Commonwealth Youth Programme.

Answer- Its purpose-

- i) Involve youth in the developmental processes of their countries.
- ii) To provide a platform for enhancing cooperation and understanding in Commonwealth countries. (Any other, any one)

(F) Case Study Based Multiple Choice Questions (4 X 1 Mark)

National Service Scheme Day is observed every year on 24 September. It was first celebrated on September 24, 1969, when the National Service Scheme was established. The motto of this scheme is 'Not me but you', through which the volunteer supports the need for selfless service in a democratic manner. Youths have a huge contribution in building a nation. Today 65 percent of the population in the country is young. For this, at the time of independence, Gandhiji had laid special emphasis on connecting youth with national service. After independence, the University Grants Commission, under the chairmanship of Dr. Radhakrishnan, recommended for the first time to start national service in educational institutions on a voluntary basis.

1. New National Youth Policy adopted by the Ministry of _____ in the year 2014.
 - a. Women and Child Development b. Rural Development
 - c. Social Justice and Empowerment
 - d. Youth Programmes and Sports

Answer – d) Youth Programmes and Sports

2. What are the important roles of youth?
 - a. Earning a livelihood b. Marrying
 - c. Maintaining physical fitness d. both a) and b)

Answer – d) both a) and b)

3. To give impetus to _____ the government provides financial assistance to send the youth living in one state on a tour to other states.
 - a. Promotion of national integration b. Promotion of adventure
 - c. Promotion of youth clubs
 - d. Promotion of Indian Railways and other traffic

Answer - a) Promotion of national integration

4. Which of the following statements is false?

- a. When the family is unable to provide positive support to the teenagers, then some teenagers begin to consume alcohol or drugs.
- b. Loyalty and spirit of patriotism is not encouraged among boys and girls through training of scouts and guides
- c. Students of National Service Scheme are involved in national development works like removing weeds from ponds, digging pits, construction, and repair of roads etc.
- d. In order to be socially fruitful and economically productive, youth need proper education, training and personal development.

Answer- b) The training of scouts and guides does not promote the spirit of loyalty and patriotism among boys and girls.

(G) Short Answer Questions (2 Marks)

1. 'What does vulnerable mean? Briefly explain.

Answer - The term vulnerable refers to those individuals/ groups in the society who are more likely to be affected by adverse conditions and/ or who may have a more damaging effect on adverse conditions. Children, youth, elderly are vulnerable groups. If a person's needs are not met in daily life, then that person becomes vulnerable.

2. Seema works as a planner in an organization for the elderly. She has to meet people from different backgrounds, both inside and outside the organization, in relation to work. Explain what skills she would use and which two groups she might have to talk to.

Answer: Peoples' skill

- a. Community/ Society - Any program or institution will succeed only if the society is also involved in it. To plan and manage and implement them through partnership, to promote participation in the organization by interacting with the people working in various prestigious positions of society.
- b. Private Sector- To talk to the private sector financial institutions,

companies etc. for the help of the organization, inform them about the new plan or innovative programs.

- c. Government officials- various tasks such as meeting financial assistance and other legal requirements may require dialogue with government departments.
- d. People working in the organization- For the organization to function smoothly, there should be cordial relations between all the people (both beneficiaries and working people). (Any other, any two)

3. What are some concerns in terms of elderly?

Answer- Some concerns in the context of old persons-

- a. Health is a major concern. Older persons are more susceptible to diseases due to less physiological strength and defense mechanisms. Disabilities such as vision loss and blindness due to cataract, deafness due to nerve disorder, difficulty in walking due to arthritis and a general inability to take care of themselves can occur.
 - b. Pains of Loneliness - They suffer the pangs of loneliness as their children get married or go out of the family to earn a livelihood.
 - c. They become financially dependent on their children, due to which they feel stressed.
 - d. In city life, they also experience the feeling of becoming a burden on others due to small family, nuclear family, lack of time to care for the elderly, limited space to live or high cost of living.
 - e. Sometimes concerns like privacy, long working hours of family members, independence, materialism, focus on self are also responsible for the inability to adequately care for the elderly.
- (Any other, any two)

4. Which groups of youth are considered more vulnerable?

answer -

- a. Rural and tribal youth.
- b. Youth who have left school.
- c. Adolescents, particularly adolescent girls.
- d. Youth with disabilities.

- b. Youth in special difficult situations such as victims of trafficking, illegal occupations, orphans, and street children.

(Any other, any two)

(H) Short Answer Questions (3 Marks)

1. Why are children, youth and the elderly vulnerable?

Answer - Children, youth and elderly are vulnerable due to the following reasons:

	Children	Youth	Elderly
1	Living in challenging situations and difficult situations.	Unable to keep pace with many biological changes occurring in the body.	Low physiological strength, mental problems.
2	Basic requirements of food, health, care, shelter, and rearing are not met.	Peer pressure, Alcoholism or drug abuse to relieve stress.	In addition to illnesses, many disabilities with aging such as- vision impairment, inability to take care of themselves.
3	Other needs of the child such as love, nurturance and stimulation is not met in a holistic manner.	Not receiving positive support from the family/ surroundings	Pain of loneliness, separation, being ignored by children or giving less time.
4	Due to adverse experiences of any kind, their full capabilities do not develop and leave a lasting impact on the child's development.	Facing multiple risks related to sexual and reproductive health.	The feeling of becoming a burden on others, The stress of being financially dependent on the children.
(Any other, any two for each group)			

2. David has come to India from New York for training at a voluntary institution. Tell him about two ongoing programmes for each of the children, Youth and Elderly.

Answer:

	Programme for Children/Children Institutions	Programme for Youth / Youth Institutions	Programme for Older Persons / Aids Institutions
1	Integrated Child Development Services —ICDS provides health, nutrition and sanitation education for mothers, non-formal pre-school education for children between the age of three to six years, supplements for pregnant and lactating mothers, Provides food, growth monitoring, immunisation and vitamin A supplements.	National Service Scheme (NSS) School level students are to be involved in social service and national development programmes such as construction and repair of roads, plantation, sewing, weaving and vocational training.	Multi-service centers which care them out of day-to-day education and entertainment Opportunities provide health care and companionship with fellow partners.
2	S.O.S. Children's Village — an independent non-governmental social organisation providing family-based long-term care to orphaned or abandoned children who don't live with their biological families. They live in a stable family environment until they become independent young adults.	Rashtriya Seva Swayamsevak Yojana- Nehru Yuva Kendras are involved in youth national development programmes, youth leadership training programmes, vocational training, rural sports etc.	Mobile Medical Care Units for elderly living in rural, remote and backward areas.

	Programme for Children/Children Institutions	Programme for Youth / Youth Institutions	Programme for Older Persons / Aids Institutions
3	<p>For children aged 3-18 years, who are in the periphery of the state for various reasons, three types of children's homes are being run by the government in partnership with non-governmental organizations (NGOs).</p> <p>(i) Observation Homes—Where children temporarily live until their parents are traced.</p> <p>(ii) Special Homes where juveniles (children below the age of 18 years) who violate the law are kept under custodial care.</p> <p>(iii) Adolescents/ children homes where children are kept whose family is not traced, are provided education and vocational training by the Government.</p>	<p>Promotion of adventure—many youth clubs and NGOs organize activities with financial assistance from the government for mountaineering, hiking, sailing, raft exhibitions, swimming and cycling, etc. which develops courage, risk-taking, collaboratively working in the team and tolerance among the youth.</p>	<p>Assistive devices/ devices for the hearing impaired and hearing impaired for the elderly, Physiotherapy Clinic Physiotherapy Center for the elderly.</p>

	Programme for Children/Children Institutions	Programme for Youth / Youth Institutions	Programme for Older Persons / Aids Institutions
4	To strengthen and facilitate adoption rules, the Central Adoption Resource Authority (CARA) has been constituted on the advice of the Supreme Court to frame guidelines for adoption to protect the welfare of children and their rights.	Through training of scouts and guides, rallies, and jamborees etc. Boys and girls have integrity, foster loyalty, a sense of patriotism and character development.	Day-care center (daily care center) for patients with Alzheimer's disease/ dementia.
5		In a way to promote national integration, the government sends the youth living in one state to visit other regions to develop an understanding of the difficulties, social customs of various regions and people there.	The Indira Gandhi National Old Age Pension Scheme is for older persons aged 60 years or above who are either destitute or belong to a family below the poverty line.
Any other, any two programs for each group			

3. Naveen is planning to open his own private institute for children/ youth/elderly people. Guide him by mentioning six important points related to it.

Answer -

- i. Acquiring information and developing understanding about children, youth and the elderly.
 - ii. A clear and complete concept - what its goal is and how the organization will contribute to meeting the needs of the target group.
 - iii. What will be the benefit to the targeted beneficiaries.
 - iv. Combining the service / services provided.
 - v. Financial assistance for running the organisation.
 - vi. Recruitment of staff with various skills and knowledge to oversee various aspects of the programme
 - vii. Knowledge of activities based on organization registration formalities, recurring evaluation, and feedback.
 - viii. Programme execution skills
- (Any other, any six)

(I) Long Answer Questions (4 Marks)

1. What is Nehru Yuva Kendra Sangathan? Explain about any two programmes under the National Service Volunteer Scheme.

Answer:

The Nehru Yuva Kendra's were established in 1972 with the objective of providing opportunities for rural youth to participate in the process of nation building and at the same time for their personality and skill development.

The Nehru Yuva Kendra Sangathan (NYKS) was established in the year 1987-88 as an autonomous body under the Ministry of Youth Affairs and Sports to oversee the work of these centers. NYKS is the largest grassroots voluntary organization of its kind in the world. It gives the right direction to the youth of 13-35 years of age based on the principles of voluntaryism, self-help, and community participation.

Programme Under National Service Volunteer Scheme:

- i. Through various activities, self-reliance, secularism, socialism, democracy, national unity, and scientific temper has to be practiced among the youth.
- ii. Some activities like formal education, social service camps, organizing youth sports, cultural and entertainment programs, vocational training, youth leadership training camps and youth clubs are encouraged and established.
- iii. These activities are organized to make the out of school youths self-reliant, to make them literate and to develop mathematical skills.
- iv. They are aimed at improving their efficiency and making them aware of their growth prospects, in which youth can become functionally competent, economically productive, and socially useful.

(Any other, any two programs)

2. The Juvenile Justice (Care and Protection of Children) Act, 2015 deals with which two categories of children? What are the children in need of care and protection as per this Act?

Answer-

The Juvenile Justice (Care and Protection of Children) Act, 2015 is concerned with two categories of children-

- a. Those who violate the law and
- b. Those who need care and protection. **Refer to Points to**

Remember Number-8

(J) Long Answer Questions (5 Marks)

1. Prashant completed a bachelor's degree in social work followed by a diploma in youth-development work from Indira Gandhi National Open University. He has been appointed to the post of Assistant Manager in the Scout and Guide organization. He interacts with several specific individuals regarding the partnership, planning, management, and implementation of various programs. Apart from these, he deals with several officials in various government departments in relation to negotiating in financial institutions,

exchanging support from other companies in support of the organization, obtaining loans or other legal requirements, etc. Prashant also has responsibility for paying office rent, buying equipment like computers, and keeping records of accounts / goods. In the above works, identify Prashant's educational qualifications, people skills and administrative skills and list them separately.

Answer:

Educational Qualifications	People skills	Administrative Skills
Bachelor's degree in social work	Interaction with people	Paying office rent
Diploma in Youth Development Work from Indira Gandhi National Open University	To plan, manage and implement partnerships	Buying equipment, computer etc.
	Exchanges on organization support from other companies, negotiating in financial institutions	Responsibilities for keeping records Account / goods
	Interaction with officials of government departments to meet loan and other legal requirements	

2. Kusum has to go to a remote area to deliver a lecture on 'Aged in India', a project on social work. Help Kusum by making a list of ten ongoing programs for the elderly in the country.

Answer: Programs for Older Persons:

- i. Old Age Homes to provide food, care and shelter.
- ii. Respite Care Homes and Continuous Care Homes for Older Persons who live in old age homes but are seriously ill requiring continuous nursing care and respite.
- iii. Providing mobile medical care units for the elderly living in rural, remote, and backward areas.

- iv. Research, Advocacy and Awareness building programmes in the field of Ageing.
 - v. Programmes to build and strengthen intergenerational relationships particularly between children/youth and elderly.
 - vi. Programmes for providing Institutional as well as Non institutional Care/Services to the elderly.
 - vii. Multi-Service Centers for Older Persons to provide daycare, educational and entertainment opportunities, healthcare, companionship.
 - viii. Indira Gandhi National Old Age Pension Scheme (IGNOAPS) for the elderly aged 60 years or above.
 - ix. Disability and hearing aids for the elderly.
 - x. Physiotherapy clinics, physical therapy centers for the elderly
 - xi. Help lines and Counseling Centers for older persons.
- (Any other, any ten programs)

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice questions

1. Life expectancy, which was about 29 years in 1947, increased to how many years in 2011?
 - a. 67.9 b. 64
 - c. 66 d. 63.9
2. Which of the following is not a vulnerable group?
 - a. children b. women
 - c. young soldier d. Older
3. Which of the following programs is not for youth?
 - a. Scout and Guide b. CARA
 - c. NSS d. Promotion of national integration
4. where children live temporarily until their parents are traced and information about their family background is collected.
 - a. Support and Counselling Centre b. Daily care centre
 - c. Observation home d. Special Home

(B) Match the following

- | | |
|---|--|
| A) I. C. D. S. | (i) Recreational Opportunities
Health Care |
| B) Special Homes | (ii) Development of rural areas |
| C) Multi-service center | (iii) Vaccination and Vitamin A
Supplements |
| D) National Service
Volunteer Scheme | (iv) Children below 18 years of age |

Pick the correct option-

- | | |
|---------------------------------------|---------------------------------------|
| a. A - iii), B - iv), C - i), D - ii) | b. A - iv), B - i), C - iii), D - ii) |
| c. A - ii), B - iv), C - i), D - iii) | d. A - iv), B - iii), C - ii), D - i) |

(C) Fill in the blanks

1. The National Policy for Older Persons was launched in the year _____.
2. The Juvenile Justice (Care and Protection of Children) Act _____ has now replaced the Juvenile Justice (Care and Protection of Children) Act, 2000.
3. If the requirements of a person are not fulfilled in the order of daily life, then that person becomes_____.
4. The National Youth Policy was adopted by the Ministry of Youth Affairs and Sports in 2003, the new National Youth Policy was implemented in the year _____.
5. In the Indira Gandhi National Old Age Pension Scheme, the beneficiaries should be of the age of _____ or above.
6. Large population of senior citizens about _____ percent, is living below the poverty line.

(D) Picture Based Questions -

1. Identify the picture and state what activity it is. It is encouraged by the government in which ongoing program for the youth.



2. Identify the picture and state to which vulnerable group this symbol is associated with and to which ongoing programme run by the Government of India?



(E) Very short answer question -

1. In which year was the Juvenile Justice (Care and Protection of Children) Act replaced?
2. What is the approximate number of children living on the roads without shelter in India?
3. What are the children living in challenging and difficult situations called?
4. Give any two requirements of youth to be socially useful and economically productive.
5. Name two activities to be done under the promotion of adventure.

Case Study Based Multiple Choice Questions (3 x 1 Marks)

1. The population of the elderly in India, i.e. the number of persons above 60 years of age, is increasing rapidly. The elderly share is 6.7 percent of the total population, which is expected to grow by more than 10 percent by 2021. This segment of the population faces many medical and psychological problems. The care of the elderly is called geriatric care. The one who is young today is going to be mature and later elderly or aged. Therefore, there is an urgent need to pay more attention to issues related to ageing. Which of the following skills would be required for a career in the management of an institution?
- a. Craftsmanship and Technical Training Skills
 - b. People and administrative skills
 - c. Hardware and Fitting Skills
 - d. Industrial Skills Training
2. Why is aging a major social challenge?
- a. Elderly live a good meaningful life
 - b. Some elderlies are financially active
 - c. They have vast experience
 - d. They do not get family support

Or

Individuals of what age are considered senior citizens in India?

- a. 60 years or less
 - b. 60 years or more
 - c. 65 years or more
 - d. Between 60 and 65 years
3. Which of the following programmes is not for the elderly?
- a. Old Age Home Facility
 - b. Indira Gandhi National Old Age Pension Scheme
 - c. Relaxation and facilities in rail travel and air travel
 - d. Free Mobile Phone Services

Or

What employment opportunities will be available after obtaining a Certificate in Geriatric Care Assistance (CGCA) from State Open Universities, National Institute of Social Defense or other institutions?

- a. Medical ageing care provider/supervisors in juveniles Home
- b. X-ray technician/physiotherapist in a non-government hospital
- c. Therapy Associate/Wellness Worker
- d. both a) and b)

Short Answer Questions (2 Marks)

- 1. How can scouts and guides develop the notion of nation building?
- 2. How many children are currently benefiting from the ICDS programme? What is the role of Anganwadi in this program?
- 3. What is meant by CARA? For which vulnerable group is it constituted?
- 4. Mention any four specific characteristics of the elderly population.
- 5. Who are the juvenile delinquents? Which act is there for prevention of juvenile crime?
- 6. Explain any two types of children's homes

Short Answer Questions (3 Marks)

- 1. Shalu and Vinay are keen on adopting a child in their family. How can they legally complete this process?
- 2. What kind of programmes are suitable for the youth?
- 3. What three conditions make adolescents stressed? How do these conditions affect an adolescent's health and sense of identity?

Long Answer Questions (4 Marks)

- 1. An elderly person suffering from mental illness is estranged from his family. There is no place for his food, shelter, and care. In this context, explain about the following-
 - a. What options does the government have for such elderly people? Mention any four.
 - b. What are the responsibilities of the family to take care for the elderly suffering from mental illness.

2. Write in detail about any two programmes for youth in India.

Long Answer Questions-(5 Marks)

1. In the earthquake-ravaged village, ten-year-old Ravi has no support. Explain the following in this context.
 - a. What arrangements does the government make for such children?
 - b. Name an independent non-governmental social organization that provides family-based long-term care to such children?
 - c. Describe four main features of this organization?
2. In the absence of proper care and protection, what activities can children be engaged in? Mention any five. Explain the objectives and target groups of the Integrated Child Development Scheme.

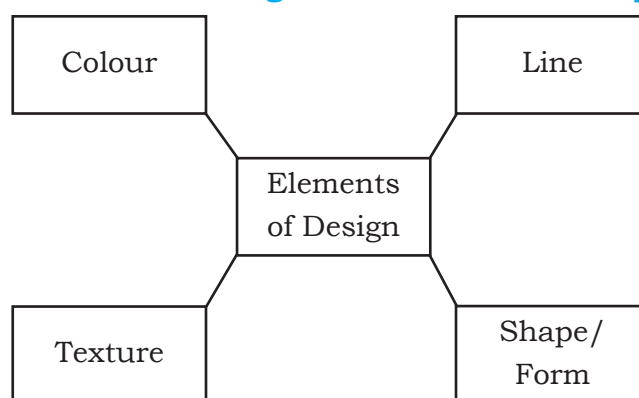
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10. DESIGN FOR FABRIC AND APPAREL

‘POINTS TO REMEMBER’

1. **Design is the human power to conceive, plan and realise products that serve human beings in the accomplishment of any individual or collective purpose.**
2. **Designs are of two types- Structural, Applied**
 - i. Structural design depends on the basic cut of the garment. Fabric is cut and stitched in different ways to give the structural design in the dress. Example- A line frock.
 - ii. Applied design is super imposed on the fabric. It beautifies the dress and it looks attractive. Example- embroidery, fancy buttons, lace etc. on garments.
3. **Two main factors of Design- Elements and Principles**

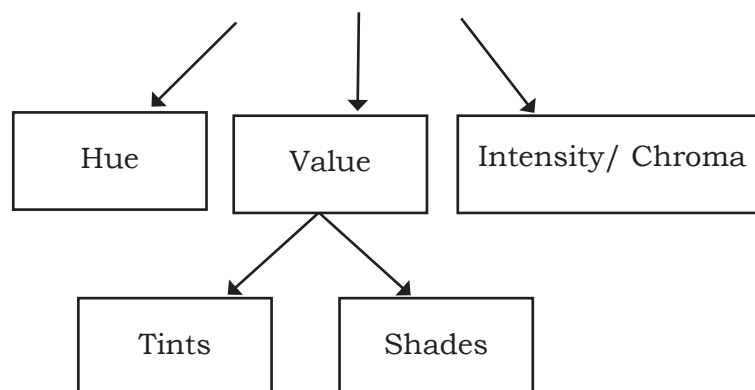
4.



5. **Choice of colour of clothes depends on the following points-**
 - i. Personal choice
 - ii. Season
 - iii. Occassion
 - iv. Peoples' thoughts
 - v. Culture/ Traditions
 - vi. Climate
 - vii. Fashion
6. **Colour can be defined as reflection of light striking the surface of an object. It is the visual sensation resulting from reflection**

of visible light rays that strike the retina and stimulate cells in the nerves of the eye. The nerves send a message to the brain and we can see colour. When all light rays are reflected, the object appears white, when none are reflected, it is black.

7. Light is a form of radiant energy. It is a part of electromagnetic radiation spectrum. Sunlight is the radiant energy reaching the Earth from sun by light waves.
8. When light falls on raindrops, it gets scattered to produce the spectrum of seven colours. Spectrum is briefly called VIBGYOR. The seven colours are Violet, Indigo, Blue, Green, Yellow, Orange and Red. Besides these seven colours, sunlight rays have ultra-violet and infra-red rays.
9. Receding or restful colours. These are light rays of short wavelengths like- green, bluegreen, blue and purple. Advancing or Stimulating colours. These are light rays of longer wavelengths like- red, orange, yellow.
10. According to Munsell's colour wheel, three aspects of colour-



Hue- Hue is the common name of the colour like red, blue

Value- Value describes lightness or darkness of a colour. When white is added to any colour to make it light, it is called Tint. Black can be added to any colour to make it dark. It is called Shade. Pink and mehroon are two values of red colour.

Intensity or chroma- It tells the brightness or dullness of a colour like rose red and blood red are of different intensities.

11. Three types of colour according to Munsell's colour wheel- Primary, Secondary and Tertiary.

Primary colour- They are basic colours which cannot be made by mixing any other colours e.g. red, yellow, blue.

Secondary colour- When two primary colours are mixed in same quantities, secondary colours are formed e.g.

Blue+Yellow= Green

Blue+Red= Purple

Red+Yellow= Orange

Tertiary colours- When two colours (one primary and one secondary) are mixed in same quantities, tertiary colours are formed e.g.

Red+Orange=Red Orange

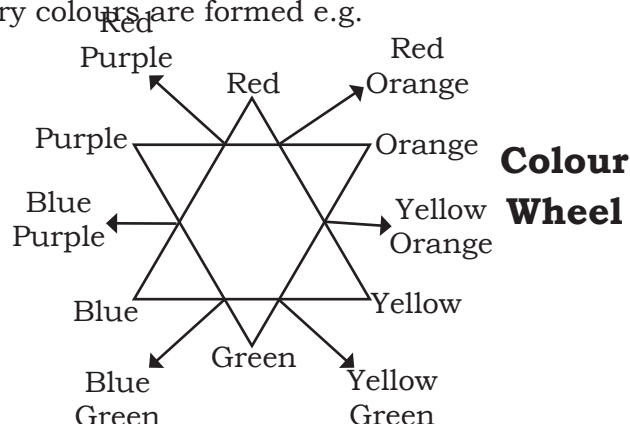
Red+Purple=Red Purple

Yellow+Green=Yellow Green

Yellow+Orange= Yellow Orange

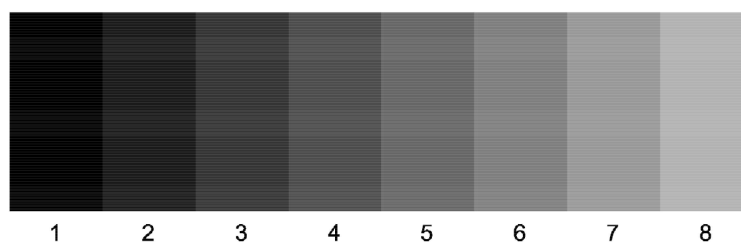
Blue+Green= Blue Green

Blue+Purple=Blue Purple

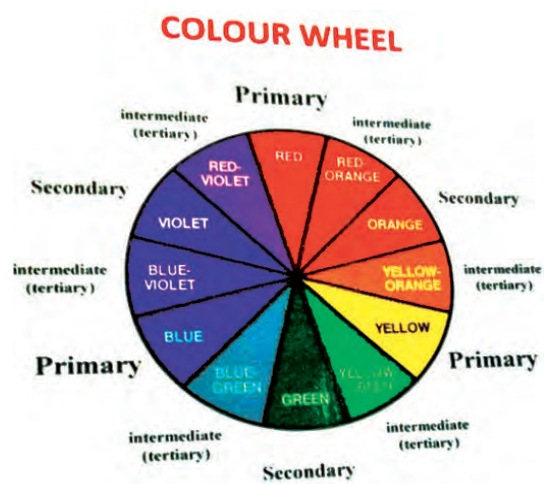


12. Neutral Colours/ Achromatics- They are colours without colour like- white, black, grey, silver, metallics.

13. Grey scale- Grey scale helps to judge the value of any colour. It has 11 grades (0 to 10). Value of black is 0 and white colour is 10.5 is the mid value for grey or hue It shows the tints and shades of any colour (hue).



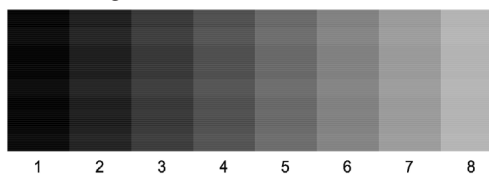
14. Recognising colour- There are many ways to recognise a colour



Neutral Colours



Grey Scale



Pantone Colour Chart



Pantone Shade Card



- i. According to various values and intensities- like red colour can be of many types; brick red, blood red, tomato red, ruby red, carrot red.
- ii. According to natural sources of colour- like fruits, flowers,

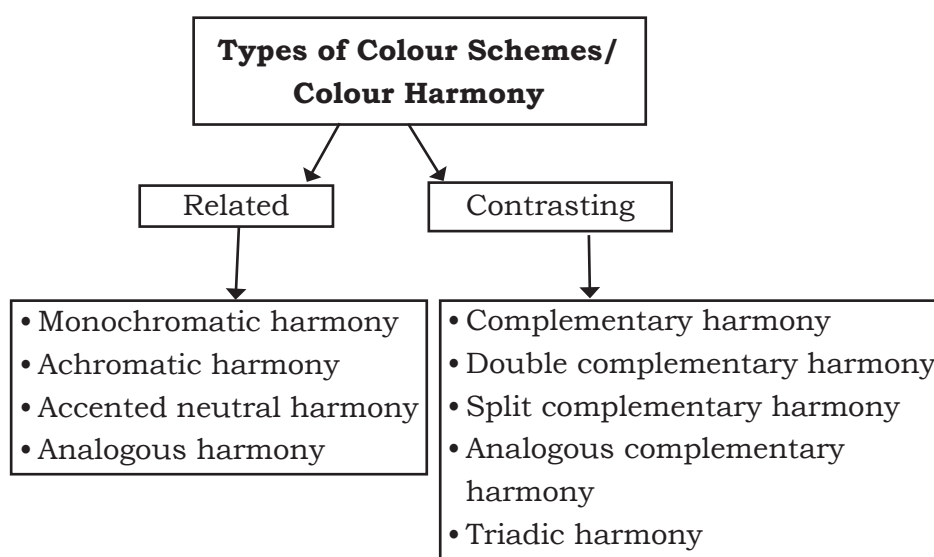
trees, food items, animals, birds, stones, metals.

- iii. Pantone shade card- Pantone shade card shows all possible hues, tints and shades in varying intensities. Each has been given a code number, which is recognised internationally.

15. Colour can be added on fabric at different stages-

- i. At fibre stage- Many times fibre can be dyed. It is done when fibres which are not easily dyed or if the design requirement is for a yarn with multicoloured fibres. Dyeing at fibre stage is done rarely because it is an expensive process.
- ii. At yarn stage- Many times yarn is dyed which helps to create multifarious designs like woven stripes, checks, plaids, brocade and jacquard.
- iii. At fabric stage- It may be done on ready fabrics using one colour to produce simple single coloured fabrics and also as designed materials through tie and dye or batik.
- iv. At fabric stage, colour can be added by painting, printing, embroidery, patch or applique work.

16. Colour scheme/ Colour harmony- using various colours in a systematic manner is called Colour Scheme or Colour harmony.



Related Colour Schemes/ Harmonies

Colour schemes which are made using colours which lie near each other on the colour wheel are called related colour schemes/ harmonies. They have atleast one common hue. They are of four types-

- i. Monochromatic harmony- This colour scheme is based on one hue. Here one hue, with different values and intensities is used. e.g. red, pink, mehroon.
- ii. Achromatic harmony- Only neutral colours are used in this colour scheme. e.g. white, black.
- iii. Accented neutral harmony- In this colour scheme, one neutral colour and one other colour are used. e.g. white and red, black and yellow etc.
- iv. Analogous harmony- In this colour scheme, two or three neighbouring colours of the colour wheel are used. e.g. yellow, yellow green and green.

Contrasting Colour Schemes/ Harmonies

Colour schemes which are made using colours which lie far away from each other on the colour wheel are called contrasting colour schemes/ harmonies.

- i. Complementary harmony- In this colour scheme, two colours are used which lie exactly opposite to each other on the colour wheel. e.g. red and green, blue and orange.
- ii. Double complementary harmony- In this colour scheme, there are two pairs of complements which are neighbours to each other on the colour wheel. e.g. red, green, purple, yellow.
- iii. Split complementary harmony- In this colour scheme, one colour and two colours on left and right of its complement are used to make a colour scheme. e.g. red, blue green, yellow green.
- iv. Analogous complementary harmony- This colour scheme is a combination of analogous and complementary schemes, a complement selected for dominance in a group of neighbouring colours. e.g. red, red purple, purple and yellow, yellow green, green.
- v. Triadic harmony- In this colour scheme, three colours are used which form equidistant triangle on the colour wheel. e.g. red, blue, yellow.

17. Texture is the sensory impression of sight and touch and refers to the tactile and visual qualities of the material.

Texture can be described in the following terms-

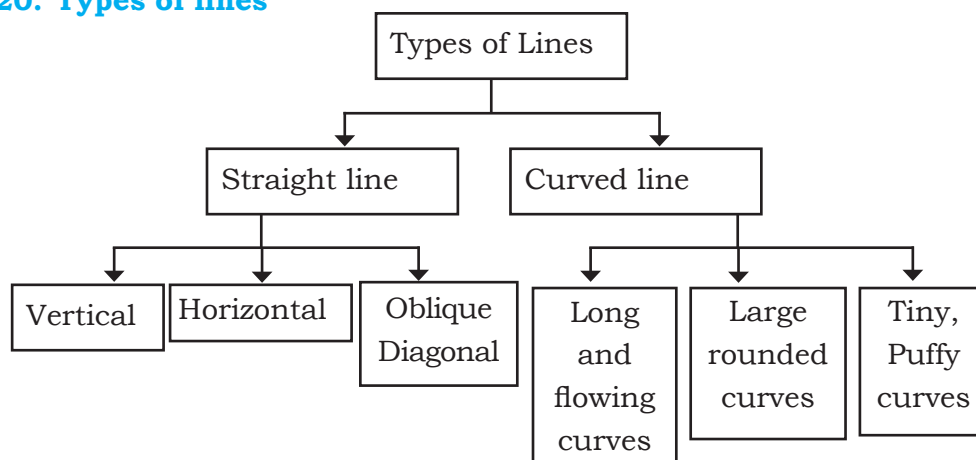
- i. How it looks- shiny, dull, opaque, transparent, translucent, dense, glossy
- ii. How it behaves- limp, stiff, sticking out, clinging, flowing out.
- iii. How it feels- soft, crisp, harsh, smooth, rough, course, grainy, pebbly.

18. Factors which determine the texture in textile materials-

- i. Fibre content- fibre type (natural or man made), its length and fineness and its surface characteristics.
- ii. Yarn processing and yarn type- method of processing, twist inserted during processing, fineness of the yarn and type of yarn.
- iii. Fabric construction technique- Weaving (type of weave and its compactness), knitting, felting, braiding, lace making.
- iv. Fabric Finishes- Stiffening (Starching, sizing or gumming)] ironing, calendaring, tentering, napping, fulling.
- v. Surface ornamentation- tufting, flock printing, embroidery and stitched effects.

19. Line is defined as a mark that connects two points. It has a beginning and an end. It can be outline of an object, shape or form. As an element of design, line indicates the shape of things, provides movement and determines direction.

20. Types of lines





Straight lines- Straight lines is a rigid unbroken line, which creates different effects depending on its direction.

They can express mood. They indicate force, strength and rigidity.

Straight lines are of three types-

- i. Vertical lines- These lines stress up and down movement. They give an illusion of height, and give the severe, dignified and reserved. effect.
- ii. Horizontal lines- These lines stress one side to other side movement. They give an illusion of width and give a stable and placid effect.
- iii. Oblique or Diagonal lines- These lines increase or decrease width and height depending on the degree and direction of angle. They can create an active, startling or dramatic effect.

Curved Lines- Curved line is one with any degree of roundness. The curved line can be a simple arc or a complicated free hand curve.

The degree of roundness determines the curve. A slight degree of roundness is called a Restrained curve, a greater degree of roundness gives a circular curve. Certain objects are associated with these curves and named as such, for example- parabola, scroll, meander, hairpin, whiplash. on serpentine, figure of 8 etc. Curved lines appear soft and graceful.

Curved lines are of three types-

- i. Long and flowing curved lines- They appear most graceful and rhythmic.
- ii. Large rounded curves- They lend a dramatic touch and tend to exaggerate size.
- iii. Tiny puffy curves- They are youthful and gay.

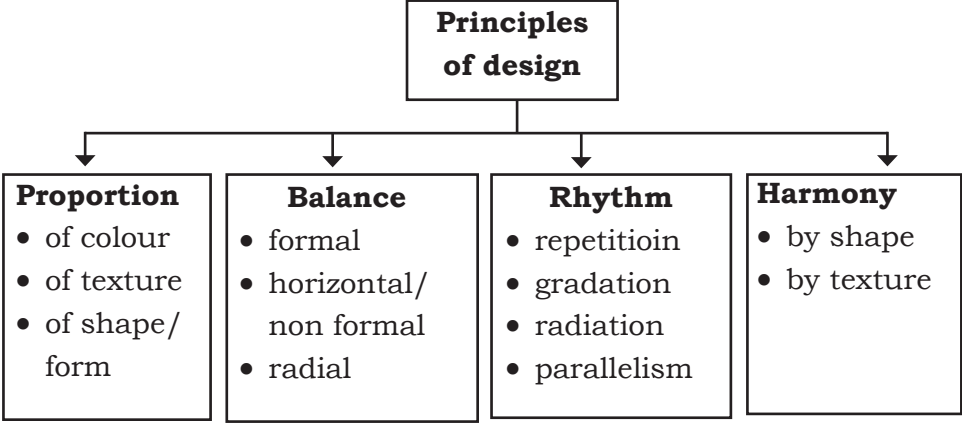
21. Shapes or Forms are made by connecting lines. They can be two dimensional like drawing or print on a fabric. They can be three dimensional (which can be viewed from three or more sides) like a garment on human body. The characteristics of the lines used will determine the characteristics of the shape.

22. Four basic groups of shapes-

- i. Natural shapes- They are like nature or common shapes of man made objects.
- ii. Stylised shapes- They are simplified or modified natural shapes. They may have some part distorted or exaggerated.
- iii. Geometric shapes- They are those which can be mathematically formed, which are made by using ruler, compass or other measuring instruments.
- iv. Abstract shapes - They are free form. They do not resemble any specific object but may represent different things to different people because of personal association.

23. Pattern is formed when shapes are grouped together. This grouping may be all of one shape or a combination of two or more types of shapes. The arrangement of these shapes can also be natural, stylised, geometric or abstract.

24. Principles of Design are the rules that govern how design elements are mixed in the most appropriate way.



PRINCIPLE OF DESIGN
PROPORTION (Golden Mean)



FORMAL BALANCE

INFORMAL BALANCE



RADIAL BALANCE



EMPHASIS



HARMONY



RHYTHM



REPETITION

RADIATION



GRADATION

PARALLELISM

1. PROPORTION- Proportion means relation of one part of an object to another. This relationship can be created in size, colour, shape and texture. This is generally based on the proportion of **Golden Mean**. The Golden Mean of a skirt and top is 3:5:6 and of a pant shirt is 5:8:13.

There are various ways of bringing proportion in a dress -

- i. Proportion of colour- Different colours can be worn as shirt and pant to create proportion of colour by using the Golden mean.
- ii. Proportion of texture- This is achieved when various textures of material used for making a dress increase or decrease the size of the person wearing the garment, eg. heavy textured garments do not look good on a thin person.
- iii. Proportion of shape and form- The size and positioning of motifs or print in a dress are in proportion to the size of the wearer. Small child's dress should have small print, elderly person's dress should have big prints. In pregnancy, women's kurti should have high waist bodice. Unequal horizontal division makes a person look slim.



Proportion of shape

2. BALANCE- Balance means equalling the distribution of weight from the central point of the garment. If a vertical line is drawn in the centre of any garment, then it should have balance. The elements of design-line, form, colour, texture all are considered while creating balance in a dress.

Balance can be achieved in three ways-

- i. Formal balance- A human body is symmetrical, which means the body appears to be the same on each side of a central vertical line. If a central vertical line is made in any garment, and its left and right side are same, then that garment has formal balance, like in a shirt both sides there is collar, cuff, sleeve etc. This is less expensive. Formal balance gives a feeling of stability, dignity and formality but tends to get monotonous.



Formal Balance

- ii. Non formal/ Horizontal balance- If a central vertical line is made in any garment, and its left and right side are not same, then that garment has non formal/horizontal balance like



Non formal/ Horizontal balance

angrakha kurta. This can be expensive but does not get monotonous.

- iii. Radial balance- This type of balance can be created when the design details of a garment emerge or radiate from a central focus point. This is a complicated design and is used for novelty effect.



Radial balance

3. EMPHASIS- It is the focal point of the garment, which first attracts the viewer's eye. Point of emphasis attracts others and adds interest in the garment. Emphasis can be created by colour, design, lines and accessories like attractive buttons, embroidery. Example- getting beautiful patch or embroidery done on neck of the garment, wearing, attractive belt on a plain gown. People with figure problems can emphasise or hide their figure problems. like a woman with slim waist can wear a bright and contrasting belt to emphasise the positive part of



Emphasis

her figure, whereas a woman with large hips wears a hip belt or other design details at the hip area would highlight it further.

4.RHYTHM- Rhythm means repetition of lines, colours, other elements of design or details to Create a pattern by which the eye can flow through the material or article/ garment. When any garment is seen from one end to other end, rhythm should not break inbetween. Rhythm can be created by use of lines, shapes, colours and textures in such a way that it gives visual unity.

Rhythm can be created in the following ways-

- i. Repetition- Repetition of embroidery, laces, buttons, piping, colour etc at necklines, sleeves and hemlines can bring about rhythm



Repetition

- ii. Gradation- Rhythm can be achieved by gradual increase or decrease in



Gradation

size of motifs, lines, buttons, colours and textures like arranging patch/ embroidery in a shirt from small to large sequence, colour of the saree increases from light to dark colour or decreases from dark to light colour.

- iii. Radiation- Here eyes move in an organised way from a central point eg. gathers in waist, yolk or small pleats in cuffs which radiate like sun rays.

- iv. Parallelism- This is obtained when elements lie parallel to each other eg. tucks in a yoke or Knife pleats in a skirt. Bands of colours also create a rhythm effect in a dress.



Parallelism

5.HARMONY- Harmony or Unity is created in a garment when all elements of design come together to give a pleasing harmonious effect.

Harmony can be obtained by two ways-

- i. Harmony by shape- It is obtained when all areas of a garment reflect the same shape. eg. in a girl's frock; collar, cuff, pockets and sides all are in curved shape.
- ii. Harmony by texture- If a dress is in several pieces, like salwar,



Harmony by shape



Harmony by texture

kurta, dupatta; then selecting the right texture can help to create harmony. Cotton salwar kurta with cotton dupatta establishes good harmony.

25. To have a career in the field of Design for Fabric and Apparel, following knowledge is essential -

- i. Knowledge of fibre characteristics, its advantages and limitations and its processing.
- ii. Knowledge of dyeing properties of different fibres and fabrics.
- iii. Knowledge of Principles of design.

26. Various institutes offer both long and short term courses leading to a certificate, a diploma, an associate, or a bachelor's degree in the field of Design for fabric and apparel like- Home Science colleges, NIFT, ITI etc.

27. Scope of Fabric and Apparel-

- i. Work in Textile design industry.
- ii. Research work
- iii. Producing designs for textile companies or fashion houses
- iv. Working in Design agency - Costume designer.
- v. Becoming freelance designer
- vi. Becoming fashion coordinator
- vii. Becoming fashion illustrator
- viii. Being Visual merchandiser
- ix. Becoming Retail manager in textile mills
- x. Being an entrepreneur
- xi. Becoming fashion merchandiser

Full forms of Abbreviations-

1. NIFT- National Institute of Fashion Technology
2. IGNOU- Indira Gandhi National Open University
3. ITI- Industrial Training Institute
4. VIBGYOR- Violet, Indigo, Blue, Green, Yellow, Orange, Red

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice Questions

1. Name the type of design
 - a. Structural
 - b. Radial
 - c. Applied
 - d. Both a and c**Ans.** d. Both a and c.
2. Which of the following colour is not in VIBGYOR?
 - a. Red
 - b. Blue
 - c. White
 - d. Green**Ans.** c. White
3. Lightness of hue is called _____ of hue.
 - a. Tint
 - b. Shade
 - c. Shade card
 - d. Chroma**Ans.** a. Tint

4. Which of the following quality does not determine the texture of the fabric ?

- a. Yarn type b. Fibre type
- c. Cost of fabric d. Ornamentation of fabric

Ans. c. Cost of fabric

5. _____ lines give an illusion of height

- a. Horizontal b. Vertical
- c. Diagonal d. Curved

Ans. b Vertical

(B) Match the following

- | | |
|---------------|------------------|
| A. Emphasis | i) Repetition |
| B. Balance | ii) Golden mean |
| C. Rhythm | iii) Focal point |
| D. Proportion | iv) Formal |

Pick the correct option

- | | |
|--------------------------|-----------------------|
| a) Ai, B iv, C ii, D iii | b) Aii, Bi, Ciii, Div |
| c) Aiii, Biv, Ci, Dii | d) Aiv, Biii, Cii, Di |

Ans. c) Aiii, Biv, Ci, Dii

(C) Fill in the blanks.

- i. Tiny puffy _____ lines are youthful and gay.
- ii. Two main factors of design are _____ and _____.
- iii. According to _____ colour wheel, colours are of three types.
- iv. _____ colours are called colours without colour.
- v. Full form of ITI is _____

Ans.

- i. curved
- ii. elements, principles
- iii. Munsell
- iv. Neutral / Achromatic
- v. Industrial Training Institute

(D) Picture based Questions

- i. Look at the picture and identify the colour scheme/ harmony.



Ans. Complementary harmony

- ii. Draw a diagram to show one way of bringing emphasis on young girl's frock.

Ans.



(E) Very Short Answer Questions

- i. What is meant by Grey scale?

Ans. Grey scale helps to judge the value of any colour. It has 11 grades (0 to 10).

- ii. How is any colour recognised at international level?

Ans. Colours are recognised at international level by Pantone Shade card. This card shows all possible hues, tints and shades in varying intensities.

- iii. Define Proportion in garments.

Ans. Proportion means relation of one part of an object to another. This relationship can be created in size, colour, shape and texture.

- iv. In order to make a career in Fabric and Apparel, a person should have knowledge of which two things?.

Ans. i. Knowledge of fibre characteristics, its advantages and limitations and its processing.
ii. Knowledge of Principles of design.

Case Study Based Question (1 mark x 4)

Design industry is a vibrant, varied and dynamic creative sector that plays a powerful and important role in several areas of our lives. Working in textile or fabric design demands awareness of the changing trends and styles and an ability to produce designs that are fresh, current or even ahead of the fashion curve. Textile designs for apparel fashion tend to have a quicker turnaround than designs for furnishing. Textile designers work in industry- researching and producing designs for textiles companies or fashion houses-but they might also work for a design agency or as freelancers.

1. What is a person who can provide us consistent look and also adapt current trends, called?

- a. Garment expert
- b. Fashion designer
- c. Garment merchandiser.
- d. Interior decorator

Ans. b) Fashion designer.

2. What is the dullness or brightness of any colour called?

- a. Hue
- b. Value
- c. Intensity
- d. Spectrum

Ans. c) Intensity

3. Which of the following dress is an example of Achromatic harmony?

- a. White shirt
- b. Pink frock
- c. Black suit and colourful dupatta
- d. Red top and green skirt

Ans. a) White shirt

4. Which of the following is incorrect statement-

- a. Structural design depends on the basic cut of the garment
- b. Applied design is super imposed on the fabric.
- c. VIBGYOR is a group of seven colours.
- d. Value is the common name of the colour

Ans. d) Value is the common name of the colour.

Short Answer Questions (2 marks)

1. Shalu wants to buy clothes for herself. On what four factors will the selection of colour of the clothes depend?

Ans. Selection of colour of the clothes will depend on the following factors-

- i. Choice
- ii. Season
- iii. Fashion
- iv. Occasion

2. Give difference between Restful and Stimulating colours.

Ans. Restful or receding colours are light rays of short wavelengths like- green, blue, purple. Stimulating or advancing colours are light rays of longer wavelengths like- red, orange, yellow.

3. What do you understand by texture? On what three aspects does the texture of a fabric depend?

Ans. Texture is the sensory impression of sight and touch and refers to the tactile and visual qualities of the material.

Texture of a fabric depends on three aspects-

- i. How it looks- shiny, dull, opaque, transparent, translucent, dense, glossy.
- ii. How it behaves- limp, stiff, sticking out, clinging, flowing out.
- iii. How it feels- soft, crisp, harsh, smooth, rough, course, grainy, pebbly.

4. Neetu wants to make a career in Fabric and Apparel field. Which four options she has, inform her?

- Ans.**
- i. Can work in Textile design industry
 - ii. Can do research
 - iii. Can work in a textile company or a fashion house
 - iv. Can become freelancer / entrepreneur

Short Answer Questions (3 marks)

1. According to Munsell colour wheel, which are the three types of colours? Explain giving examples.

Ans. According to Munsell Colour wheel, three types of colours are-

- i. Primary- They are basic colours which cannot be made by mixing any other colours. eg. red, yellow, blue.
- ii. Secondary- When two primary colours are mixed in same quantities, secondary colours are formed. eg. green, purple, orange.
- iii. Tertiary- When one primary and one secondary colour are

mixed in same quantities, tertiary colours are formed. eg. red orange, red purple. yellow green, yellow orange, blue purple, blue green.

2. Straight lines on garments are of three types. Give name of each type and write it's one characteristic.

Ans. Three types of straight lines

- i. Vertical lines- They give an illusion of height.
 - ii. Horizontal lines- They give an illusion of width.
 - iii. Oblique or diagonal lines- These lines increase or decrease width and height depending on the degree and direction of angle.
3. How is harmony obtained in a garment? Explain by taking an example of any dress.

Ans. Harmony or Unity is created in a garment when all elements of design come together to give a pleasing harmonious effect. Harmony can be obtained in two ways-

- i. Harmony by shape- It is obtained when all areas of a garment reflect the same shape. eg. in a girl's frock; collar, cuff, pockets and sides all are in curved shape.
- ii. Harmony by texture- If a dress is in several pieces, like salwar, kurta, dupatta; then selecting the right texture can help to create harmony. Cotton salwar kurta with cotton dupatta establishes good harmony.

Long Answer Questions (4 marks)

1. According to Munsell's Colour wheel, explain the three aspects of colour.

Ans. Refer to Points to Remember Number-10

2. At what stages, colour can be added on a fabric ? Discuss the four stages of dyeing.

Ans. Refer to Points to Remember Number-15

3. Rohan wants to make his garments according to Related colour schemes. Explain him different related colour schemes so that he can choose properly.

Ans. Colour schemes which are made using colours which lie near each other on the colour wheel are called Related colour schemes / harmonies. They have at least one common hue. They are of four types -

- i. Monochromatic harmony - This colour scheme is based on one hue. Here one hue, with different values and intensities is used. eg. red, pink, mehroon.
- ii. Achromatic harmony - Only neutral colours are used in this colour scheme. eg. white, black
- iii. Accented neutral harmony - In this colour scheme, one neutral colour and one other colour are used. eg. white and red, black and yellow etc.
- iv. Analogous harmony - In this colour scheme, two or three neighbouring colours of the colour wheel are used eg. yellow, yellow green and green.

4. Which are the four basic groups of shapes ? Explain in details.

Ans. Refer to Points to Remember Number-22

Long Answer Questions (5 marks)

1. You have to decorate your double bed sheet using contrasting colour schemes. Explain all five colour schemes by giving examples.

Ans. Colour schemes which are made using colours which lie far away from each other on the colour wheel are called Contrasting colour schemes.

They are of five types-

- i. Complementary harmony- In this colour scheme, two colours are used which lie exactly opposite to each other on the colour wheel. eg. red and green, blue and orange.
- ii. Double complementary harmony - In this colour scheme, there are two pairs of complements. which are neighbours to each other on the colour wheel. eg. red green, purple, yellow.
- iii. Split complementary harmony- In this colour scheme, one colour and two colours on left and right of its complement are used to make a colour scheme eg red, blue green, yellow green.
- iv. Analogous Complementary harmony- This colour scheme is

a combination of analogous and complementary schemes, a complement selected for dominance in a group of neighbouring colours. eg. red, red purple, purple and yellow, yellow green, green.

- v. Triadic harmony- In this colour scheme, three colours are used which form equidistant triangle on the colour wheel eg red, blue, yellow.

2. What do you understand by texture of fabrics? Which are the four factors which determine the texture?

Ans. Texture is the sensory impression of sight and touch and refers to the tactile and visual qualities of the material.

Factors which determine the texture in textile materials -

- i. Fibre content - fibre type (natural or man made), its length and fineness and its surface characteristics.
 - ii. Yarn processing and yarn type- method of processing, twist inserted during processing, fineness of the yarn and type of yarn.
 - iii. Fabric construction technique- weaving (type of weave and its compactness), knitting, felting, braiding or lace making.
 - iv. Fabric finishes- stiffening (starching, sizing or gumming), ironing, calendaring, tentering, napping, fulling.
3. Your friend wants to design her dress. Explain her methods of bringing rhythm in her dress.

Ans. Rhythm means repetition of lines, colours, other elements of design or details to create a pattern by which the eye can flow through the material or article/ garment.

She can bring rhythm in her dress by the following ways-

- i. Repetition - Repetition of embroidery, laces, buttons, piping, colour etc. at necklines, sleeves and hemlines can bring about rhythm.
- ii. Gradation- Rhythm can be achieved by gradual increase or decrease in size of motifs, lines, buttons, colours and textures like arranging patch/ embroidery in a shirt from small to large sequence, colour of the saree increases from light to dark colour or decreases from dark to light colour.

- iii. Radiation- Here eyes move in an organised way from a central point. eg. gathers in waist which radiate like sun rays.
 - iv. Parallelism- This is obtained when elements lie parallel to each other like band of two colours in a dress can bring rhythm.
4. Kiran wants to make a career in Fabric and Apparel field but she is not totally aware of its career options. Make a list of career options in Fabric and Apparel for her.

Ans. Refer to Points to Remember Number-27

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple Choice Questions

1. Group of seven colours is called_____
 - a. Spectrum
 - b. Light
 - c. Chroma
 - d. Colour wheel
2. _____shade card is accepted at international level.
 - a. Munsell
 - b. Pantone
 - c. Prang
 - d. Phantom
3. _____lines give an illusion of width.
 - a. Vertical
 - b. Long curve
 - c. Tiny, puffy curve
 - d. Horizontal
4. Which of the following is not a Principle of Design?
 - a. Emphasis
 - b. Proportion
 - c. Pattern
 - d. Rhythm
5. Which of the following institute provides education in Fabric and Apparel?
 - a. NIFT
 - b. ITI
 - c. IIT
 - d. Both a) and b)

(B) Match the following

- | | |
|---------------------------------|---------------------------------|
| A. Achromatic harmony | i) Combination of three colours |
| B. Double Complementary harmony | ii) Two pairs of complements |
| C. Monochromatic harmony | iii) Only neutral colours |
| D. Triadic harmony | iv) One colour |

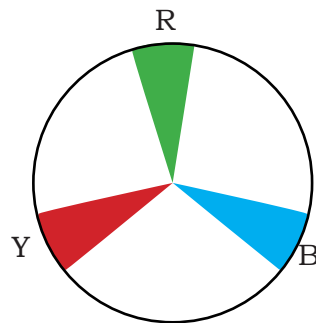
- | | |
|-----------------------|-----------------------|
| a. Ai, Bii, Ciii, Div | b. Aiv, Biii, Cii, Di |
| c. Aii, Bi, Ciii, Div | d. Aiii, Bii, Civ, Di |

(C) Fill in the blanks

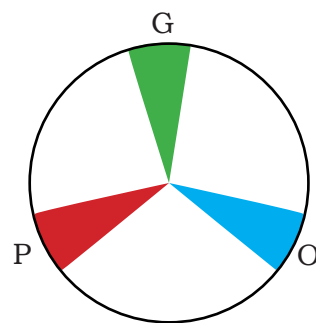
- _____ design depends on the cut, not super imposed.
- Sunlight is a _____ energy reaching the Earth from the Sun by light waves.
- In a grey scale, mid value is for _____ or _____.
- When lines are joined _____ is made and when these are joined _____ is made.
- 5:8:13 is an example of _____.

(D) Picture based Questions

- Look at the picture and identify the colour scheme / harmony.



- Draw vertical lines on any garment and tell these lines give which illusion?
- Identify the types of colours from the given picture.



(E) Very Short Answer Questions

1. What are restful colours? Give one example.
2. Texture of fabric can be identified by its characteristics. Give any two examples of fabric characteristics.
3. What do you understand by Golden mean?
4. Define Principles of Design.

Case Study Based Questions (1 mark ×3)

Colour is all around us in many forms. It is one of the most important aspects of all textile materials-be it for apparel, household, commercial or institutional use. The identity of the product is most often attributed to colour. Everyone responds to colour and has definite preferences. Colour reflects the season, events and the spirit of people. The choice is affected by culture, tradition, climate, season, occasion or purely personal reasons. Colour is an important part of fashion. Designers carefully choose fabric colours to make a definite statement.

1. Dyeing, printing, embroidery etc. done on a garment is which type of design?
 - a. Structural
 - b. Applied
 - c. Decorative
 - d. Resist printing
2. Red, blue and yellow are _____ colours.
 - a. Secondary
 - b. Tertiary
 - c. Primary
 - d. Intermediate

OR

Dyeing at _____ stage is done rarely because it proves to be an expensive process.

- a. Fabric
 - b. Yarn
 - c. Fabric
 - d. Garment
3. Which of the following is not a method of rhythm in dresses?
 - a. Repetition
 - b. Parallelism
 - c. Gradation
 - d. Harmony

OR

When a shirt has same collar, cuff, sleeves on both sides, it is called_____ balance.

- | | |
|-----------|---------------|
| a. Formal | b. Non formal |
| c. Radial | d. Defective |

Short Answer Questions (2 marks)

1. Give one difference between two types of design. Give one example of each.
2. According to colour theory, why can any person see any colour? Why does an object appear white or black?
3. What is a Triadic harmony? Give one example also.
4. Karan wants to do his own work in Fabric and Apparel field. Suggest him four options.

Short Answer Questions (3 marks)

1. What are the three aspects of a colour? Define each of them.
2. Curved lines on garments are of three types, name each type and write its one characteristic.
3. You want to get a salwar stitched for yourself. Draw, and explain any one way of getting emphasis on the kameez.

Long Answer Questions (4 marks)

1. Draw a picture of Munsell Colour Wheel. Also name three types of colours.
2. What are colour schemes ? Classify all types of colour schemes.
3. Meena wants to become a fashion designer. For this, she should have a knowledge of which all aspects? Inform Meena in which institutes she can study in this field.

Long Answer Questions (5 marks)

1. What is shape or form? What are the different shapes in clothes? Explain in detail.
2. You have to design a frock for your five year old neice. Taking examples of any five colour harmonies, explain the method of designing the frock.
3. What is balance? Explain formal and horizontal balance with the help of examples.

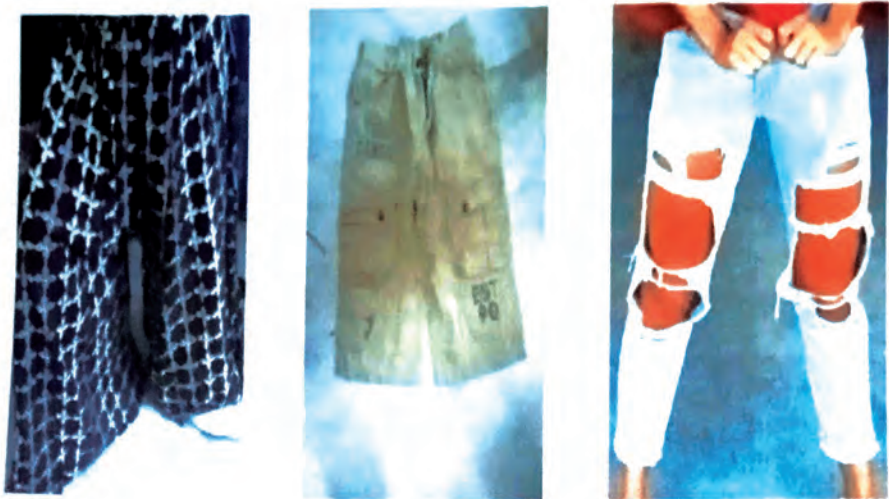
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11. FASHION DESIGN AND MERCHANDISING

‘POINTS TO REMEMBER’

1. **Fashion design and business is an exciting career option in which the creative urge and materialistic needs of a person are fulfilled.**
2. **With the production of 'ready to wear garments in the year 1920, Fashion Apparel has established itself as an important business employing millions of people in design, manufacturing, distribution, marketing, advertising, broadcasting and consulting.**
3. **Significance: Fashion design and merchandising enables one to understand the various processes of fashion business suchs as:-**
 - i. The process involved in producing raw materials, apparel, and accessories.
 - ii. The process of manufacturing fibres, fabric and garments.
 - iii. How a style changes to fashion?
 - iv. It helps to determine the suitability of a fashion for a particular retail operation and for what length of time. It encompasses planning, buying and selling.
4. **Fashion Terminology**
 - i. Fashion: It is a style or styles which are most popular at a given time.
 - ii. Style: It is any particular look or characteristics in apparel or accessories.
 - iii. Fads: Temporary fashions that are short lived and go away quickly. (Fig.11.1)
 - iv. Classic: A style that is never completely obsolete and is accepted for an extended period. These have the distinction of simplicity of design (Fig.11.2)
5. **Fashion Development**
 - i. The ancient and medieval styles did not change for almost a century. Fashion changes were encouraged by Western civilization due to globalization.

FASHION TERMINOLOGY



11.1 EXAMPLES OF FADS(TEMPORARY FASHION)



11.2 EXAMPLES OF CLASSICAL STYLES

ii. Fashion Hub France

- France's dominance in international fashion began in the 18th century.
- The style of royal costumes of Emperor Louis XIV and his court members made Paris the fashion capital of Europe.
- The silk, ribbon and lace for the items of the emperors and courtiers were supplied from different cities of France and the garments were hand-stitched according to the person's size or measurements.
- The art of garment making was called Couture. The man who designed the garment was called couturier and the woman counterpart was a couturiere.

iii. The industrial revolution marked the beginning of technological advances in textile and apparel production.

- Due to the invention of spinning machine and machine looms, more items started being manufactured in a short time. (Fig 11.3, 11.4)
- The invention of the sewing machine transformed handicrafts into an industry. In 1859 Issac Singer developed the foot treadle for the sewing machine. (Fig 11.5)
- In 1849 Levi Strauss made pants using clothes intended for tents and wagon covers, with pockets to hold tools. These became popular and were known as 'denims'.

iv. From the 1880s, the practice of wearing skirt blouses by women was the first step towards the manufacture of ready to wear clothing.

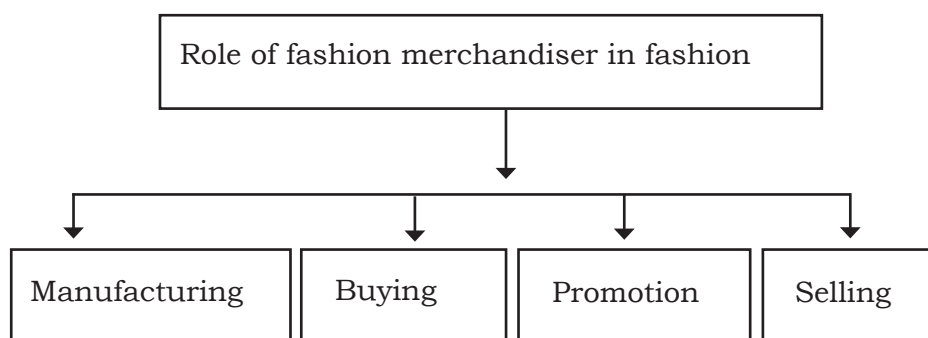
- v. By 19th century affordable fashion were made available to the general public through fairs and Bazaars. This helped both buyers and sellers to bargain according to their need.
- vi. Due to large number of people settling in towns and a growing demand for a variety of goods, general stores and retail shops were set up.

6. Fashion cycle: The way in which a fashion changes or life span of a fashion can be described as fashion cycle. The life span of any fashion is completed in 5 stages.

- i. Introduction of a Style: Designers provide a new style of fashion to the public. New designs are created by changing elements such as line, colour, shape, type of fabric and their relationship to one another.
- ii. Increase in popularity: When a new fashion is purchased, worn and seen by many people, it becomes popular.
- iii. Peak of popularity- When a fashion is at the height of its popularity, many other manufacturers copy that fashion and produce the adapted products at a lower price.
- iv. Decrease in popularity- With the arrival of adapted products in the market, they become popular in large numbers. The fashion conscious people want to buy something new and the old styles are sold in the retail shops at lower prices.
- v. Rejection of a style or Obsolescence- In the last phase the old style is slowly rejected and the new fashion cycle begins.

7. Fashion merchandiser- The person who designs, produces, promotes and distributes products for the needs and demands of consumers by turning his inspiration or imagination into a design with the use of technology is called a fashion merchandiser.

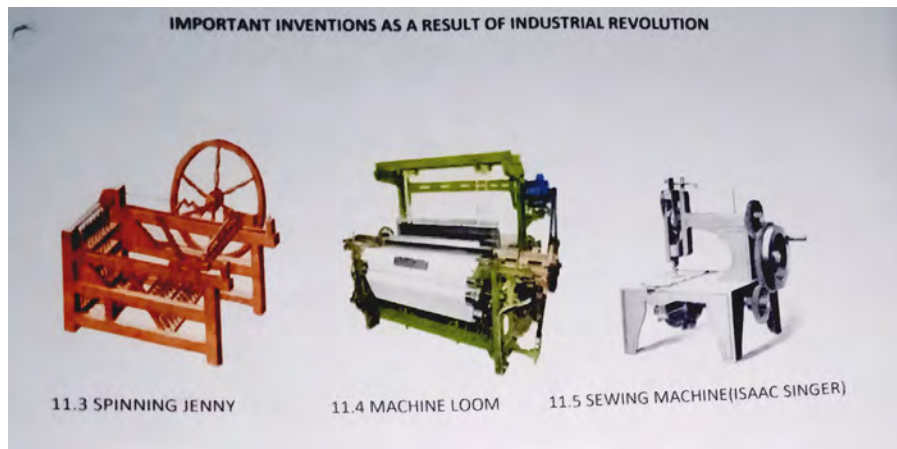
8. Role of fashion merchandiser in various aspects of fashion



i. Manufacturing

To make any piece of clothing and to turn his vision into reality, a fashion merchandiser needs to pay attention to the following facts and procedures related to the textiles.

- Historical and sociocultural understanding of fabric
- Fiber and fabric manufacturing process
- Best way to manufacture the style



- Price and Target Market

ii. Buying

The fashion merchant buys fashion materials to keep in his shop.

- He must be aware of the target market:
- He should be skillfull in making fashion trend analysis and forecasting so that he can make accurate orders for goods.

iii. Promotion

When a fashion trader works for a designer, his primary responsibility is to bring the designer's products to stores where it can be sold in large quantities. For this, he needs to have

- A creative mind, strong visual merchandising and production skills.
- To promote the products of the designer, the fashion merchandiser participates in fashion exhibitions and find the target market for the products,

iv. Selling

Fashion merchants are responsible for selling fashion items to the stores and the goods are sold in the shop (stores), For this, he should have knowledge of

- Market trends so that he can forecast and recommend production.
- Art of displaying the fashion items in the stores in an attractive way.

9. Levels of Merchandising in the fashion industry:

i. Retail Organization Merchandising: It is a specialized management activity in which fashion/product is delivered from the showroom of the fashion designer to retail outlets and from there to the customers. It is achieved by internal planning which includes

- Ensuring adequate amount of goods for sale.
- The selling price of the goods should be within the reach of consumers.
- Selling price should be such to provide profit to the retail organization.

ii. Buying Agency Merchandising: This agency provides consultancy services for the goods merchandisers. Selling

through buying agency is beneficial for exporters as it saves time and cost.

Responsibility of buying agents:

- Identification of vendors
- Cost negotiation
- Check in process quality
- Preshipment quality inspection

iii. Export House Merchandising: There are two types of merchandiser in an export house.

a. Buyer merchandiser

b. Production merchandiser

a. Buyer merchandiser

- They act as an intermediary between the buyer and the manufacturer and ensure that the product is developed according to the buyer's requirement.
- They are responsible for sourcing, sampling and communicating with the buyer.

b. Production merchandiser

- These act as an intermediary between the Production and the Buyer merchants
- Their responsibility is to ensure that production is as per the schedule and requirement of the buyers.

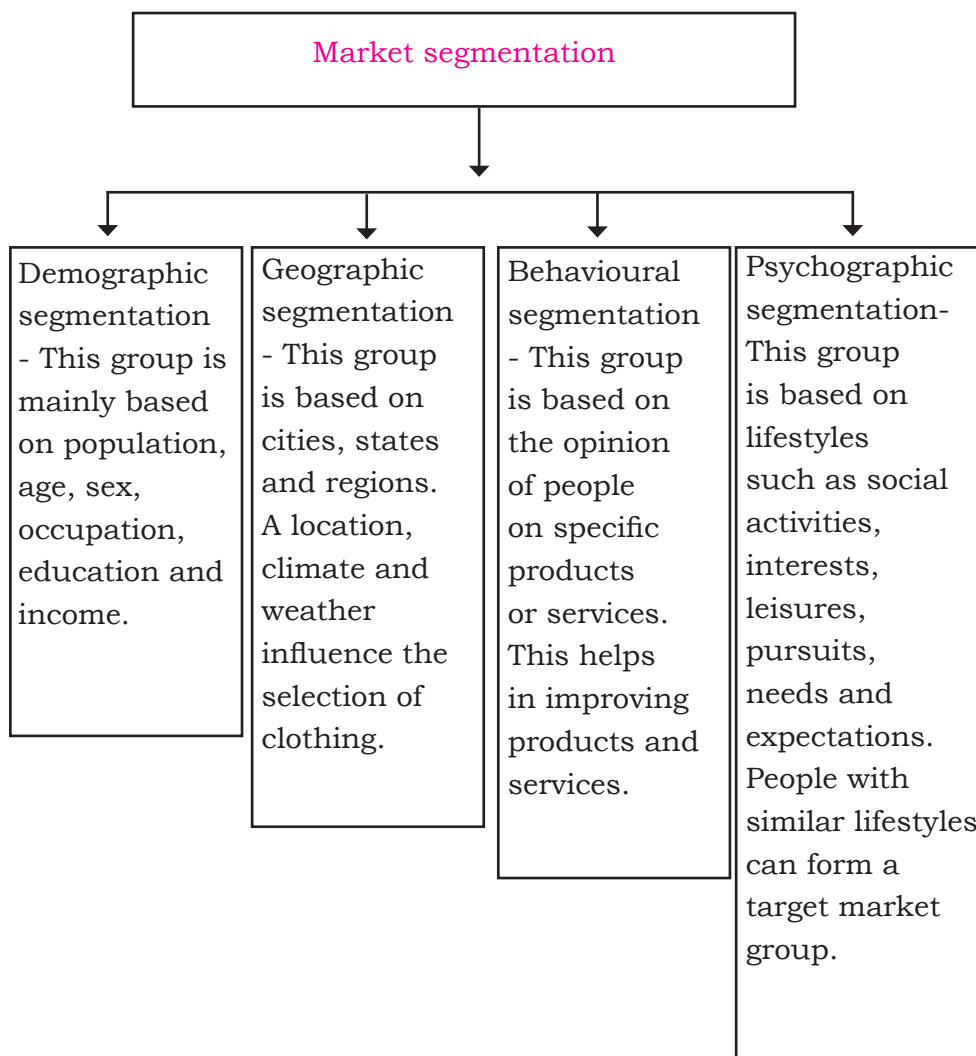
10. Target market

- The category of consumers that fashion traders targets at, to sell their products is the target market.
- We can understand the target market by market segmentation.

11. Market segmentation

This is a strategy in which large markets are divided into sub-groups of consumers, based on the common needs for the goods

and services offered in the market.



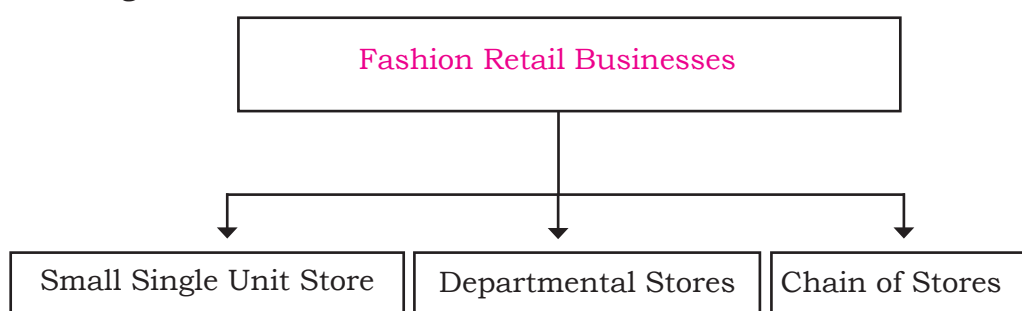
12. Right things for Business

- i. Right Merchandising: The retailer should keep its shelves full of goods that customers need.
- ii. At right place: Location is most important for the business, as it determines accessibility
- iii. At Right time. Most of the merchandise is seasonal in nature. The material should be available when it is most needed.

- iv. Right quantity: This means a beneficial profitable balance between the volume of sale and amount of inventory.
- v. Right price: The merchant must keep a price that is high enough to benefit the shop and still be low enough to be in competition and in line with customer expectations
- vi. Right promotion: Right balance between investment and the appeal created for the customers ensures successful promotion.

13. Fashion Retail Organization

The organization system in the fashion industry can be divided into three parts based on different types of merchandise, size of retail firm and target customer.



- i. Small Single Unit Store: It is a neighbourhood store, which is owned and operated by a single person or his family (Fig 11.6)
- ii. Departmental stores: It has different sections known as departments like clothing, sporting goods electronic equipments etc. (Fig 11.7)
- iii. Chain of Stores: Retail outlets that share a same brand and central management. They have standardized business methods and practices.(Fig 11.8)

14. Major Departments of Fashion Retail Organization

- i. Merchandising Division- Buying, selling, business planning and control.
- ii. Sales and Promotion Division- Advertising, publicity, visual merchandising, special events publicity, public relations.
- iii. Finance and Control Division- Credit, account payable and inventory control i.e. all types of financial transactions

- iv. Operational division- Maintenance of facilities, stores and merchandise protection, personnel, customer service, receiving and marketing of merchandise
- v. Personnel and Branch Store Division- If stores are very large then this department is required. It decides who, when and where a person will be deputed for work

15. Preparation for Career

Essential skills that a fashion designer and businessman should have.

- i. Forecast ability- The ability to forecast fashion trends is an essential part of this career. He should predict the future fashion trend based on past future trends and present future fashion trends.
- ii. Analytical Ability- They should know about the economy as a whole, know the economy of their particular company and understand how certain styles can fit into the consumer's budget so that they can get the proper benefits from their capital investment.
- iii. Communication ability- Excellent communication skills are must in this field. They should be able to negotiate with the manufacturer to fix prices and to sell products to the masses. They should have writing skills for advertisements, press release, newspapers, etc
- iv. Knowledge of style and business sense is also necessary

Professional qualifications

- i. Certificate (Certificate) or Diploma degree program in Fashion merchandising (6 months to 1 year)
- ii. 2 year post graduate program related to fashion merchandising.
- iii. 4 year Bachelor degree programme in Fashion Design or Fashion merchandising.

16. Scope (Livelihoods in the field of Fashion Design)

- i. Visual Merchandise Designer: These are responsible for the following tasks:

- Designing Window displays
 - Store arrangement
 - Creating attractive props and accents.
 - Organising clothing placements
 - Styling mannequins
 - Spearheading advertising campaigns
- ii. Fashion designer: The following tasks to be done
- Specific work of clothing and apparel design.
 - Working with popular designers.
 - Doing your own fashion work.
- iii. Set designer they are assigned for
- Conceptualize designs needed for movies television and theatre production
 - Producing set designs for trade exhibits and museums
- iv. Interior Designer:
- To combine form with function.
 - Introduce interior concepts in a particular place or area that enhances its beauty, security and functionality like retail shops, houses, offices, hotels etc.

OBJECTIVE TYPE QUESTIONS 1 MARK

(A) Multiple choice question

1. In which year did the women start wearing jeans?
- | | |
|---------|---------|
| a. 1920 | b. 1950 |
| c. 1955 | d. 1975 |

Ans. b 1950

2. The style of fashion which is short lived is called
- | | |
|------------------|-------------------|
| a. Fads | b. Distinct style |
| c. Classic style | d. Fashion |

Ans. a Fads

3. The retail shops that have the same brand and central management are called
- | | |
|--------------------|----------------------------|
| a. Business impact | b. Departmental Store |
| c. Chain stores | d. Small Single Unit Store |

Ans. c Chain stores

4. The woman designer is
- | | |
|--------------|------------------|
| a. Couter | b. Couturiere |
| c. Couturier | d. Female Cooter |

Ans. b Couturiere

2. Denims were designed by
- | | |
|-----------------|--------------|
| a. Levi Strauss | b. Louis X14 |
| c. Isaac Singer | d. Newton |

Answer- a Levi Strauss

(B) Match the following

Pick the correct option

- | | |
|-----------------------------|-------------------------------------|
| A. Style | i. A characteristic in an apparel |
| B. Visual Business Designer | ii. Link between buyer and producer |
| C Buying agent | iii. Create attractive ads |
| D. Fashion Designer | iv. Costume design |
| a. Ai, Biii, Cii, Div | b. Aii, Biv, Ciii, Di |
| c. Ai, Bii, Ciii, Div | d. Aiv, Biii, Cii, Di |

Answer-a) A i B iii C ii D iv

(C) Fill in the blanks.

- _____ is the style or styles that prevails most in a time period.
- The market segmentation that takes place on the basis of social activities, interests and needs is called_____.
- In the fashion merchandising, the department that looks after the security of stores is called_____.
- The lifespan of fashion is called_____.
- The long pant made from fabric of tents was called_____.

Answer

- Fashion
- Psychographic Segmentation
- Operational department
- Fashion cycle
- Denims

(D) Picture based question



1. Identify the type of retail organization shown in the picture and write its feature.

Ans- Small single unit store. It is a neighbourhood shop run by one person and/or family members.

(E) Very Short Answer Questions (1 mark)

1. Who is a Fashion Merchandiser?

Ans- The fashion merchandiser is someone who converts his inspiration into design. He plans produces, promotes and distributes the product according to the needs and demands of the consumers.

2. What is term given to a category of consumer that a merchandiser targets at to sell his product?

Ans- Target Market

3. Which two types of merchandisers are there in an export enterprise?

Ans- Buyer Merchandiser ii) Production Merchandiser

4. Which inventions of the Industrial Revolution encouraged the production and trade of textiles?

Ans- The invention of spinning machine and machine loom

Case Study Based Questions (1 mark x 4)

Fashion has been a part of our tradition for centuries. This is an area which attracts a large number of youth. In the era of globalization, the fashion world is making its impact fast. Creative and artistic skills are essential for making a career or livelihood in fashion designing. After passing class 12th from a recognized board, a person can pursue

a diploma or degree course in fashion designing. Fashion is never permanent. This changes with the passage of time. Every person coming to this field will always have to be vigilant and enthusiastic. It is a challenging and glamorous business.

1. Which of the following careers is not related to fashion design.
 - a. Visual merchandise designer
 - b. Set designer
 - c. Human Resource Manager
 - d. Interior Designer

Ans-c Human Resource Manager

2. What is a style of fashion that never becomes completely obsolete?
 - a. Classic
 - b. Fads
 - c. Dress
 - d. Specific style

Ans- a Classic

3. The Bachelor degree course in Fashion Design or Fashion Business is of
 - a. 2 years
 - b. 3 years
 - c. 4 years
 - d. 1 year

Ans- 4 years

4. Which of the following statements is not correct?
 - a. The history of fashion helps design makers in making current and future fashion decisions.
 - b. The exchange of goods and crafts was the beginning of the trade system.
 - c. In ancient times and medieval times, fashion used to change very fast.
 - d. Before the Industrial Revolution only the rich were able to buy fashion clothes.

Ans- c In ancient times and medieval and medieval times, fashion used to change very fast.

Short answer questions (2 marks)

1. What are the functions of Sales and Promotion Division in a fashion merchandising store?

Ans- i. The act of creating advertisements to increase sales,

- ii. Visual merchandising,
- ii. Management of special events
- iv. Organizing public relations and publicity.

2. What is the role of buying agency in fashion business?

Ans. The buying agency provides services for goods buying consultancy. A buying agent has the following responsibilities:

- i. Identification of vendors
- ii. Price negotiation
- iii. Quality check at the time of manufacture
- iv. Quality check before shipment.

3. What is the difference between style and fashion?

Ans. i. Style is the special appearance of a garment or its accessories.

- ii. One or several styles which are the most prevalent in a given period are called fashions. Style comes and goes in fashion.

4. "To interpret consumer demand one should understand target market and customer motivations. Explain

Ans. i. it is very important for any fashion trader to identify and understand the target market for his product.

- ii. Target market is the category that the merchant targets to sell his product
- iii. According to the demand and requirement of the consumers of its target market, the sales department decides the policies to sell its product.
- iv. Consumer-centric policies encourage customers to buy more. This gives the producer more profit.

Short answer questions (3 marks)

1. Describe the three primary skills that a fashion designer or merchandiser must possess.

Answer Essential skills that a fashion designer and merchandiser should have.

- i. Forecasting ability- Forecasting ability in relation to fashion trends is an essential part of this career. He can

predict the future fashion trend based on past future and present fashion trends..

- ii. Analytical ability- They should know about the economy as a whole, know the economy of their specific companies and understand how certain styles can fit into the consumer's budget so that they can get proper benefits from their capital investment.**
- iii. Communicability- They should have the ability to negotiate with the manufacturer to fix prices and have the communicative ability to sell products to the public (through advertisements, newspapers etc.).**

2. How is the organization system of the fashion retail industry divided?

Ans. Organization system in fashion retail industry is divided into three parts based on different types of business materials, size of business and target customer.

- i. Small single unit store: These are neighbourhood or local shops owned by a person or his family.**
- ii. Departmental stores: It consists of different departments like clothing, sport goods, electronic equipment etc.**
- iii. Chain stores: Retail shops of the same brand and central management. They have standardized business methods and practices.**

3. Define the fashion cycle and write the names of its stages.

Ans. The way in which a fashion changes is usually described as fashion cycle. The lifespan of any fashion is completed in 5 stages.

- i. Presentation of style**
- ii. Increase in popularity**
- iii. Peak of popularity**
- iv. Decline in popularity**
- v. Rejection of a style**

Long Answer Questions (4 marks)

1. Your friend wants to pursue fashion design and merchandising as

his career, guide him by telling about the options available.

Ans. Refer to Points to Remember Number-16

2. Enumerate the various divisions of a fashion store State any two functions of each division.

Ans. Major department of fashion retail organization—Refer to Points to Remember Number-14

Long answer questions (5 mark)

1. Outline the major steps in development of fashion.

Ans. Fashion Development—Refer to Points to Remember Number-5

2. What do you understand by fashion merchandising? Describe the role of a merchandiser in every aspect of fashion business.

Ans. Fashion merchandising means making necessary plans at the right place at the right time and at the right price that will encourage the sale of the product. Refer to Points to Remember Number-8

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK EACH)

(A) Multiple Choice Questions

1. The Fashion design and merchandising includes
 - a. Planning, buying and selling
 - b. Planning and implementing
 - c. Decision process and evaluation
 - d. Professional washing
2. What is the responsibility of a buyer merchandiser in an export enterprise?
 - a. Taking samples and finding sources
 - b. Negotiating with the buyer
 - c. Creating the design for the museum
 - d. Both a and b
3. The organization system of the fashion industry varies according to the type of merchandise, the size of the retail firm, and
 - a. Investment
 - b. Target customer
 - c. State
 - d. Popularity

4. Which market segmentation is based on the opinion of a specific product or service?
- Geographic segmentation
 - Behavioural segmentation
 - Psychographic segmentation
 - Demographic segmentation

(B) Match the following

- | | |
|---|-------------------------------|
| A Classic Style | i. saree blazer |
| B Introduction of a style | ii. short lived fashion |
| C Fads | iii. a stage of fashion cycle |
| D A step towards demand for ready to wear clothes | iv skirt blouse |

Pick the correct option

- | | |
|-----------------------|-----------------------|
| a. Aii, Biii, Ci, Div | b. Aii, Biv, Ciii, Di |
| c. Ai, Biii, Cii, Div | d. Aii, Biii, Civ, Di |

(C) Fill in the blanks:

- The invention of _____ transformed handicrafts into an industry.
- _____ of the product becomes part of the fashion merchandise when the merchant buys the fashion material to keep in stores.
- A neighbourhood shop which is run by owner and family is called _____.
- _____ act as a procurement office for the buyer.
- There are two types of merchandisers in an export enterprise _____ and _____.

(D) Picture based questions

Identify the following picture Write the effect of its invention on the fashion industry.



Or

Identify the following picture and write who invented it.



(E) Very Short answer questions (1 mark)

1. Write the two major functions of the interior designer.
2. Define fashion merchandising.
3. Which is the garment that has been the same for the last one hundred and fifty years?
4. What is the role of the target market in fashion merchandising?

Case study based questions (1 mark X 3)

Today, fashion design and merchandising is established as an important industry in the world. France's dominance in the international area began in the early 18th century. The silk fabric and ribbons used to come from many cities for the royal attire of the Emperor of France and his court. The apparel manufacturing art of France was called Couture. In the 1880s, there was a lot of development in the field of fashion. Over time, ready-to-wear clothing began. Women started wearing skirts and blouses. In the 19th century fairs and bazaars provided pocket-friendly fashion to the general public.

1. The man designing the garment in France was called
 - a. Couture
 - b. Couturier
 - c. Couturiere
 - d. The male couturier

2. Ready-to-wear clothing started in

- | | |
|---------|---------|
| a. 1920 | b. 1950 |
| c. 1880 | d. 1970 |

Or

Women started wearing skirts and blouses from the decade of

- | | |
|---------|---------|
| a. 1880 | b. 1780 |
| c. 1990 | d. 1890 |

3. Which city was considered "The fashion capital of Europe" in the 18th century?

- | | |
|------------|----------------|
| a. England | b. Paris |
| c. Italy | d. Netherlands |

-----O-----O-----O-----

12. PRODUCTION AND QUALITY CONTROL IN THE GARMENT INDUSTRY

‘POINTS TO REMEMBER’

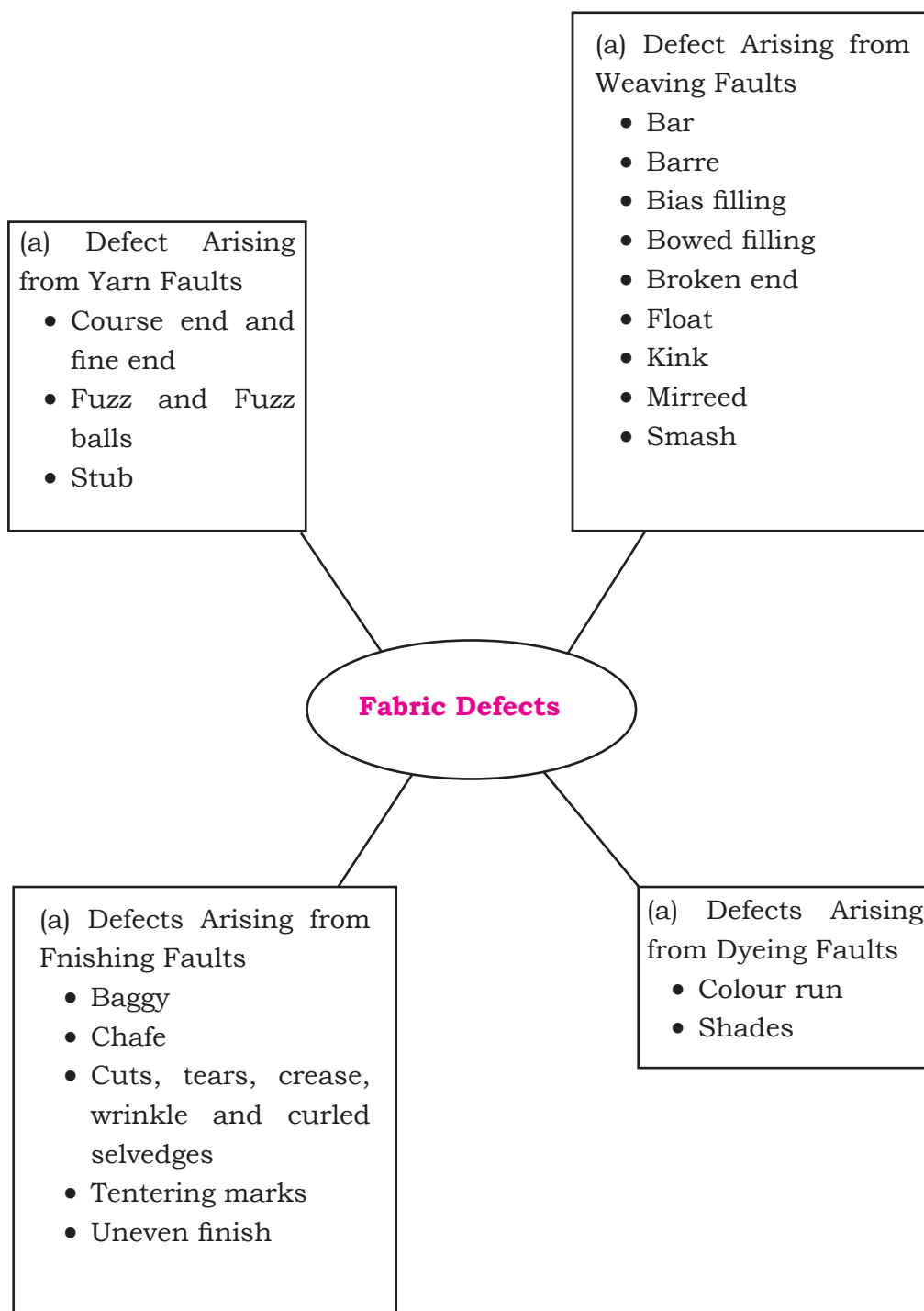
1. The garment industry of India is a ₹ one trillion industry
2. About 1/4 of volume of garment production is for export market leaving 3/4 for domestic production.
3. The industry covers over one lakh units and employs over 60 lakhs workers both directly and indirectly.
4. The indirect portion of industry helps to sustain the direct production sector in the shape of items associated with garment industry like sewing / embroidery threads, trims, machine parts, packaging material.
5. The organised sector of garment industry is roughly 20% of the total industry, concentrating chiefly on exports.
6. World over the inclination of the consumers is shifting to readymade clothing.

7. Production-

The term production generally refers to a process by which any product can be made in multiples using the same process and ensuring that product made is identical in all respects.

8. Steps of Production- Apparel production is generally done in four stages.

- i. Procurement and inspection of raw material- The process of apparel manufacture begins with the procurement of raw material and inspection of the same. This includes the fabric and trims (zippers, buttons, linings, labels, tags etc). Fabric defects can be classified following-
- ii. Fabric inspection and testing- Fabric inspection is one of the most important steps in the process of production because it defines the final quality of the product.



- There are some internationally accepted systems of fabric inspection which define the way the fabric is to be inspected and what constitutes an 'OK' fabric.
 - Certain tests are carried out to test the suitability of the fabric for its end use. The tests may be standard tests done by any fabric manufacturer or may be specially requested by a buyer of the end product.
 - Once the defect and its extent are identified the possibility of repair/ rectification is checked, if the defect can be rectified, it is sent to the selected process.
- iii. Laying and cutting of Fabric/ Material- The next stage in the production of garments is the planning and processing of the cutting of the fabric. This involves the following steps.
- Marker Plan- A marker is defined as the placement of pattern pieces on fabric in such a manner that the consumption of fabric per garment is optimised.
 - Spreading- Fabric is smoothened and spread along lengths of table in layers. The fabric may be spread by hand or with the assistance of machines called 'spreaders'. These machines may be mechanically, electrically, electronically or computer operated. The final product of the spreads process is called a 'lay'.
 - Marking- The patterns are traced on the top layer as per the defined marker.
 - Cutting- The layers are cut simultaneously using machines that may be controlled either manually or through computer systems. Different types of machines used are straight knife, round knife, band knife and die cutters.
 - Bundling- The cut pieces are bundled for further processes of stitching/ embroidery/ printing etc. The number of pieces in a bundle is dependent on the type of production system and the process sequence to be followed.

iv. Assembly of the Product– The garment pieces are next sent to the assembly or stitching section comprising of different types of sewing machines. The sewing machines may be multipurpose or the machines may be specialised. These are mainly of two types:

1. Single needle or lockstitch machine

2. Chain stitch machine.

- The process of assembly i.e. the way in which the multiple pieces of the garment are put together to make a complete garment, may use one or a combination of multiple production systems. Some of these are:

1. Tailor system- Each operator or tailor assembles an entire garment. This system is used mainly in customised clothing- clothing made to fit and to the measurements of an individual.

2. Team working or module system- The garment is assembled by a group or team of operators Each team is a mix of skilled, semi skilled and unskilled workers.

3. Unit production system- The garment assembly process is broken into smaller units called operations. Each operator is given one or more operations to do which needs to be done on the same sewing machine.

iv. Finishing and packaging-The garments are finally sent for finishing and packaging after the productions The finishing proces include final inspection, stain removal, repairs, isoning/ pressing and folding

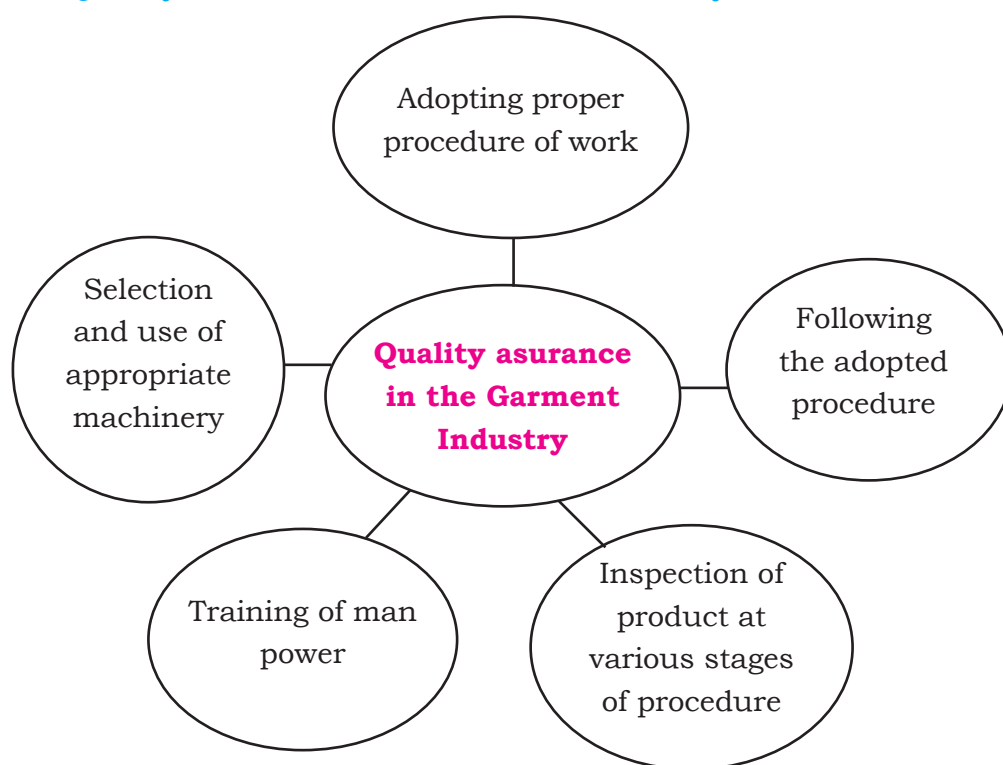
Different type of packaging-

(1) Hanger packed- Coats, suits, jacket & Children's dresses

(2) Fold packed- Shirts, T-shirts, track suits

(3) Folded & hanger packed- Trousers, pants, pajama

9. Quality Assurance in the Garment Industry



10. Preparing for a career.

To enter and excel in this field, the primary requirements are:

- Knowledge of the product- This includes the understanding of all material that goes into making of the product.
- Working knowledge of the processes involved in making of the product.
- Working knowledge of the machinery requirements for the making of the product.
- Understanding of human resources and the ability to work with resources at all levels of work- workers, supervisors, managers etc.

11. Scope in Garment Industry

- At initial stage, one may become a quality inspector or a production supervisory assistant.

- There are also career opportunities in shop floor management, production planning, quality assurance, industrial engineering, manpower training, enterprise resource planning.
- Jobs in this field can be found all over India and also in apparel manufacturing countries like Sri Lanka, Bangladesh, China, Indonesia, Vietnam and Egypt.

Definitions

1. E.P.I.- Ends per inch refers to the density of the fabric measured by the number of warp yarns in one inch of woven fabric.
2. P.P.I.- Picks per inch refers to the density of the fabric measured by the number of weft yarns in one inch of the woven fabric.
3. G.S.M.- Grams per square metre refers to the density of knitted fabric measured by the weight of the given fabric.
4. Thread Count- Number of warp and weft yarns in a square inch of woven fabric.
5. Quality control- It is a process of problems solving with the purpose of getting a 'Zero-Defect' product.
6. Quality Assurance- It is a process of preventive problem management where the problems are pre-empted and the solution put in place so that the problem does not occur.
7. Quality Management- It is a process of implementation and monitoring of quality systems, e.g. Total Quality Management (TQM), ISO etc.
8. Specifications- Characteristics of the product that are given by the buyer or desired by the consumer e.g. measurements. These may vary from buyer to buyer and product to product.
9. Standards- These are the characteristics of the product that are certified figures given by standardized and recognised international or national agencies that are mandatory to be followed to produce a quality product. For example, colour fastness of a fabric/material etc.
10. Tolerance- It limits to which specifications or standards can be varied and would still be acceptable to the consumer/buyer.

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice question.

1. Which of the following is not a fabric fault?
- a. Machine faults
 - b. Yarn faults
 - c. Weaving faults
 - d. Finishing faults

Ans. a Machine faults

2. Which type of defects arise from weaving faults?
- a. Bar
 - b. Bias filling
 - c. Colour run
 - d. both 'a' & 'b'

Ans. d both 'a' & 'b'

3. Which of the following is not a main stage of apparel production?
- a. Procurement and inspection of raw material
 - b. Laying and cutting of fabric
 - c. Finishing and packaging
 - d. Selection of sewing machine

Ans. d selection of sewing machine

4. _____ is the number of warp and weft yarns in a square inch of woven fabric.
- a. P.P.I.
 - b. Thread count
 - c. E.P.I.
 - d. G.S.M.

Ans. b Thread count

(B) Match the following

- | | |
|-------------------------|-------------------|
| A. Quality Control | (i) knife |
| B. Cutting | (ii) Looper |
| C. Value addition | (iii) Zero-Defect |
| D. Chain Stitch machine | (iv) Printing |

Pick the correct option

- a. A(ii), B(iii), C(iv), D(i)
- b. A(iii), B(iv), C(i), D(ii)
- c. A(iii), B(i), C(iv), D(ii)
- d. A(i), B(ii), C(iii), D(iv)

Ans. c) A(iii), B(i), C(iv), D(ii)

(C) Fill in the blanks

1. Tailors, embroiders and dyers constitute _____ part of the garment industry.
2. _____ machine is used for stitching of knitted fabric.
3. The most common packing technique is the use of _____
4. Quality of the product is defined as its _____

Ans. (1) Indirect, (2) Chain stitch, (3) Carton, (4) fitness for use.

Very short Answer Questions (1 Mark)

1. Who invented the sewing machine and in which year it was invented?

Ans. The sewing machine was invented by Elias Howe in the year 1833.

2. While buying a readymade shirt which size of the wearer would you need?

Ans. While buying a readymade shirt 'collar size' of the wearer is needed.

3. What do you understand by the term 'float'?

Ans. It means thread that extends unbound over the threads of the opposite yarn system with which it should normally be interlaced.

4. Why is fabric inspection done?

Ans. Fabric inspection is done to find faults or defects in the fabric.

Case Study Based Question (1 Mark × 4)

The process of apparel manufacture begins with the procurement of raw material and inspection or checking of the same. This includes the fabrics or the trims (zippers, buttons, interlining, labels, tags etc.) Fabric inspection is done to find faults or defects in the fabric. Ideally 100 percent of fabric received should be checked before it is cut. However, when the fabric is procured from a reliable source or when the fabric is certified as fault free by the fabric manufacturer, only representative sample quantities are checked.

1. Which of the following is not a defect arising from finishing fault?
 - a. Chafe
 - b. Uneven finish
 - c. Kink
 - d. Tentering marks

Ans. c Kink

2. Which of the following apparel is folded and packed?
 - a. Coat
 - b. Jacket
 - c. T-shirt
 - d. Pant

Ans. c. T - shirt

3. Which of the following test is not conducted to test the suitability of the fabric for its end use?
 - a. Colour fastness
 - b. Fabric weight
 - c. Cutting of fabric
 - d. Shrinkage

Ans. c. Cutting of fabric

4. Which of the following statement is incorrect?
 - a. Colour run is a defect arising from dyeing faults.
 - b. A fabric which will be flat on the cutting table becomes baggy.
 - c. Bias filling is a defect arising from weaving faults.
 - d. Chafe is a fabric defect arising from finishing faults

Ans. b. A fabric which will be flat on the cutting table becomes baggy

Short Answer Questions (2 Marks)

1. What are the various stages of production in a garment industry?

Ans. Garment production is generally done in four stages.

- i. Procurement and inspection of raw material.
 - ii. Laying and cutting of fabric/material.
 - iii. Assembly of the product
 - iv. Finishing and packaging
2. Explain the importance of fabric inspection before the process of apparel production.

Ans. Fabric inspection is one of the most important step in the process of production.

- i. The cost of raw material in any garment is about 70%, out of which 90% or above is that of the fabric.
- ii. In case the fabric is not inspected properly, the cost factor of

the fabric component in the garment would increase leading to less profits and in some cases, losses.

3. What are the important points to be borne in mind while choosing a course in the field of garment production or quality control?

Ans. i. The institute should have a working facility and the course should have practical perspective.

ii. The institute should have a working relationship with the concerned industry.

4. Name two defects arising from dyeing faults?

Ans. i. Colour Run- the colour of one area has bled or superimposed on the colour of another area.

ii. Shaded- The colour or bleach is not uniform from one location to another.

Short Answer Questions (3 Marks)

1. What are the various types of defects arising from finishing faults?

i. Baggy- A fabric which will not lie flat on the cutting table.

ii. Chafe- An area where the fabric has been damaged by abrasion or friction.

iii. Cuts & tears on the fabric

iv. Wrinkled and curled selvages

v. Tenting marks: Enlarged pinholes or distorted areas along the edge of the fabric caused by the holding of the fabric to width during finishing also called pin marks.

vi. Uneven finish: The finish is not uniform from one location to another.

2. Explain with examples the three ways of packaging of garments.

Ans. Packaging of the garments can be done in following ways.

i. Hanger packed- some garments are hanger packed e.g. coats, jackets, suits, children's dresses.

ii. Fold packed- Some garments are folded without hanger and packed e.g. Shirts, T-shirts, track suits.

iii. Folded & hanger packed- Some garments are folded and then packed in Hangers e.g. Trousers, pants and pajamas.

3. Which processes of assemble are used to assemble the multiple pieces of a garment?

Ans. Some of the processes of assembly are as follows:

- i. Tailor System- Each operator or tailor assembles an entire garment. This system is used mainly in customised clothing.
- ii. Team working or module system- The garment is assembled by a group or team of operators. Each team is a mix of skilled, semi -skilled and unskilled workers.
- iii. Unit production system- The garment assembly process is broken into smaller units called operations. Each operator is given one or more operations to do which needs to be done on the same sewing machine.

Long Answer Questions (4 Marks)

1. Which two types of sewing machines are used for stitching garment pieces? Differentiate between them also?

Ans. **Two types of machine used are**

- ii. Single needle machine/lackstitch machine
- iii. Chain Stitch machine

Lock Stitch/Single Needle Machine	Chain Stitch Machine
1. It uses two threads to do the stitching which enters the fabric from the top through the needle and one which enters from bottom through a bobbin	1. For stitching of knitted fabric the machine used is chain stitch machine. The stitch may use 1-5 threads for formation.
2. This machine can be used for any type of fabric and any kind of stitching operation.	2. The lower thread comes through a hooked device called looper. The looper may or may not have its own source of thread.
3. The Lock stitch is reversible and a very stable, strong and in flexible stitch.	3. The chain stitch is flexible and non-reversible by nature.

4. It is also possible to work it in reverse direction to have double stitching line.	4. This machine is used for all garments made from knitted fabric.
---	--

2. Radhika wants to built a career in garment industry. Suggest her some courses which can help her train for a career in garment industry.

Ans. i. She can apply for some certificate programmes which are for a period of a few weeks to a few months.
 ii. Diploma programme offered for a period of 1 year to 3 years.
 iii. Degree programmes of 3-4 years are offered by selected insitutes accross the country.
 iv. There are also engineering programmes that offer 'Apparel Production' as a specialisation choice.

Long Answer Questions (5 Marks)

1. How many steps are involved in the process of laying and cutting of fabric/material?

Ans. Laying and cutting of fabric is the second step of production of garments. It involves the following steps:

- Marker plan- A marker is defined as the placement of pattern pieces on fabric in such a way that the consumption of fabric per garment is optimised.
- Spreading- Fabric is smoothened and spread along lengths of table in layers. The fabric may be spread by hand or with the help of machine called 'spreaders'. The final product of the spreading process is called a 'lay'.
- Marking- the patterns are traced on the top layer as per the defined marker.
- Cutting- The layers are cut simultaneously using machines that may be controlled either manually or through computer systems.
- Bundling- The cut pieces are bundled for further processes of stitching/embroidery/printing etc. and sent to respective departments.

2. Name the additional stage of Apparel Production and discuss about it in detail.

Ans. The additional stage is 'Value Addition which is a term used to indicate any process that adds to the total cost of the product and hence increases the value of the product.

- i. It increases the use and serviceability/functionality of the product as well as its aesthetic appeal.
- ii. This includes special finishes to yarn and fabric eg. sandwash or enzymewash for denims,
- iii. Surface ornamentation such as prints and embroideries.
- iv. This could be done before, during or after assembly of the product.

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice questions

1. Which of the following defect is not included in defects arising from yarn faults.
a. Coarse end and fine end b. Colour run
c. Fuzz and fuzz balls d. Slub.
2. Which of the following test is conducted to test the suitability of the fabric for its end use?
a. Colour fastness b. Cutting
c. Shrinkage d. Both 'a' & 'c'
3. There are around one lakh units in the garment industry and employ about _____ lakh workers, both directly and indirectly.
a. 60 b. 20
c. 70 d. 90
4. The concept of Mass Production was first used to make uniform for the _____ civil war and then during World War I.
a. China b. Russia
c. America d. Japan

(B) Match the following

- | | |
|----------------|-------------------|
| A. Carton | i. Single needle |
| B. Hanger pack | ii. Stain removal |
| C. Finishing | iii. Coat |
| D. Lock Stitch | iv. Pack |

Pick the correct option

- | | |
|-------------------------------|-------------------------------|
| a. A(iv), B(iii), C(ii), D(i) | b. A(i), B(ii), C(iii), D(iv) |
| c. A(ii), B(iii), C(iv), D(i) | d. A(iii), B(i), C(ii), D(iv) |

(C) Fill in the blanks

1. Issac Merrit Singer, an _____ engineer, created the first foot treadle.
2. Overall about _____ of the volume of garment production in India goes into export markets.
3. There are internationally accepted systems of fabric inspection which define the way the fabric is to be inspected and what constitutes an _____ fabric.
4. _____ is the process of preparing any product for dispatch from one place to another.

Very Short Answer Questions (1 Mark)

1. Why is fabric inspection one of the most important step in the process of production?
2. Which is the more efficient technique of marker planning?
3. What is 'Lay' in garment production?
4. What do you understand by the term 'production'?

Case Study Based Questions (1 Marks X 3)

Once the defect and its extent are indentified the possibility of repair/rectification is checked. If the fabric can be rectified, it is sent for the selected process. If not, the fabric is rejected. Some faults may be accepted if the extent is not very high i.e. it does not affect a large area of the fabric. Sometimes the decision to accept defected fabric may be taken if the cost and/or time involved in the reprocessing of the fabric are too high to be absorbed by the cost of the order.

1. How much is the cost of raw material in any garment
 - a. 70%
 - b. 65%
 - c. 90%
 - d. 50%
2. A marker is defined as the placement of pattern pieces on fabric in such a manner that the consumption of fabric per garment is _____
 - a. Optimum
 - b. Complete
 - c. Good
 - d. Bad

Or

_____ refers to the density of the knitted fabric measured by the weight of the given fabric.

- a. E.P.I.
 - b. Thread count
 - c. G.S.M.
 - d. P.P.I.
3. The Layers of fabric are cut simultaneously using machines that may be controlled either manually or through _____
 - a. Computer system
 - b. Feet
 - c. Machine
 - d. hands

Or

The machines used for cutting cloth are of _____ types.

- a. Straight knife
 - b. Scissors
 - c. Round knife
 - d. Both 'a' & 'b'

Short Answer Questions (2 marks)

1. What is the significance of 'Mass production' in garment industry?
2. When and Why was the concept of 'Mass production' used?
3. Which items associated with the garment industry production are produced by indirect part of the industry?
4. Define 'value addition'?

Short Answer Questions (3 marks)

1. "Apparel chains all over the world are focussing more on improving the quality of the product and offering varied range of fashion design." Discuss with reasons.

2. "The faults of the fabric can be accepted after the inspection and testing." Why?
3. What is the importance of bundling of cut pieces of fabrics in the second step of garment production?

Long Answer Questions (4 marks)

1. List the machines which are used to cut the layers of fabric simultaneously. Also write the merits and demerits of any one such machine.
2. Explain in detail the unit production system of apparel production.
3. Write down the primary requirements for preparing for a career in the field of garment production and quality assurance.

Long Answer Questions (5 Marks)

1. Discuss the scope in the field of garment production and quality control.
2. What are the different stages of production in garment industry?
3. What are the different types of sewing machines? How are they different from the point of view of stitch type and their use on different fabrics?

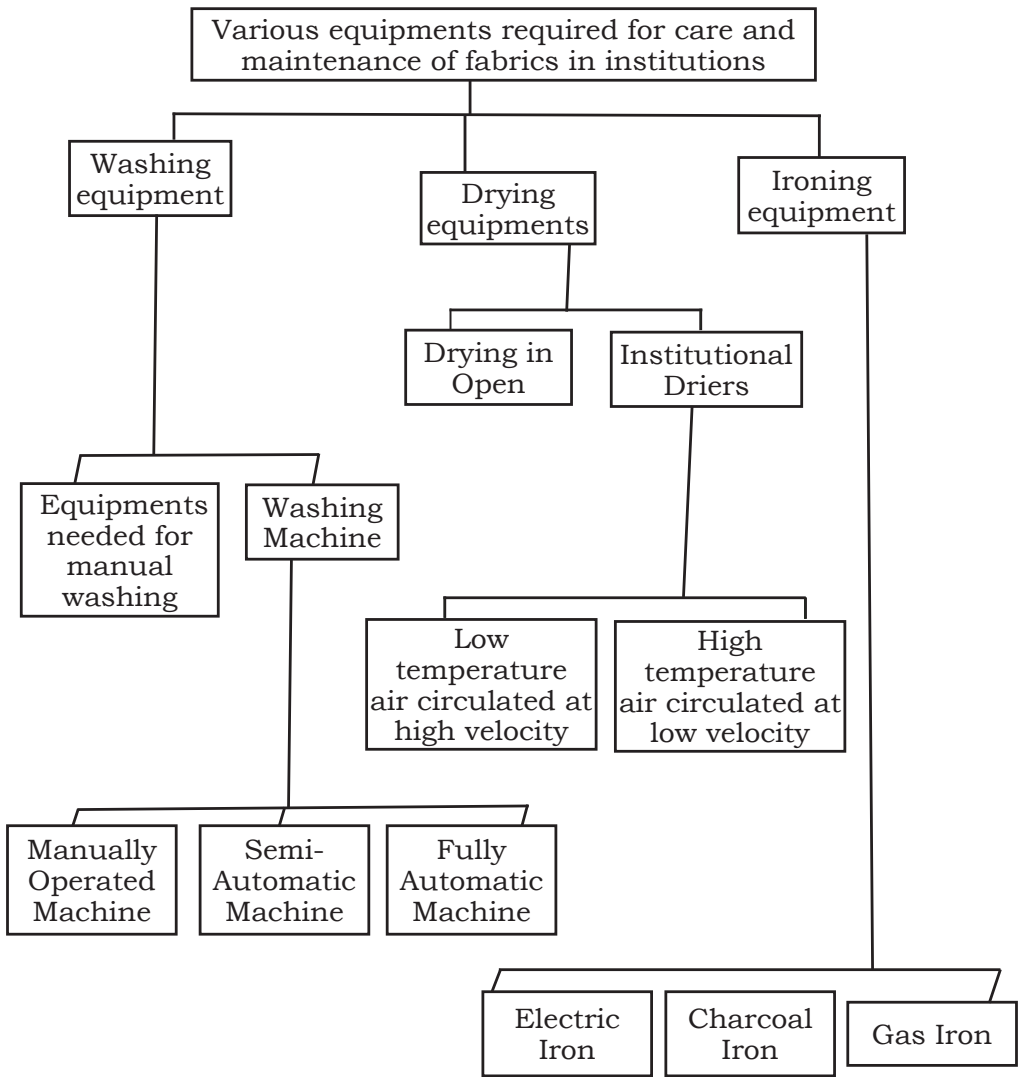
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13. CARE AND MAINTENANCE OF FABRICS IN INSTITUTIONS

‘POINTS TO REMEMBER’

- 1. Fabrics used in institutions must have certain special qualities, in line with their industrial purpose and scope. These fabrics are selected on the basis of their special usage and functionality.**
- 2. Special care and maintenance is necessary to maintain the special qualities of these materials and to extend their life span.**
- 3. The care and maintenance of fabrics includes two aspects;**
 - i. To keep the material free from physical damage and to rectify any damage that may have occurred during its use.
 - ii. To retain the visual appearance and textural characteristics of clothes.
- 4. The care and maintenance requirements of different fabrics depend on the following factors;**
 - i. fibre content
 - ii. type of yarn
 - iii. fabric construction technique
 - iv. finishes given to the fabric
 - v. Purpose for which they are used

5. Laundry equipment of organizations



6. Washing Equipments

WASHING MACHINES



13.1 Top Loading



13.2 Front Loading



13.3 Manually Operated



13.4 Semi Automatic



13.5 Fully Automatic

Washing machines are found in two types of models

- a. Top loading (Fig 13.1)
- b. Front loading (Fig 13.2)

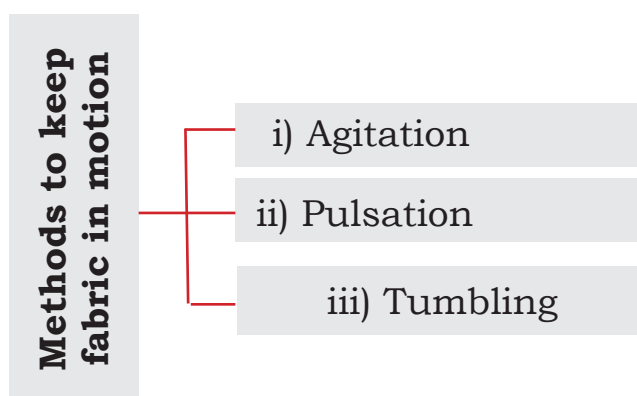
These models can be of three types:

- Hand operated- In these machines 50% or more of the work is done manually by the operator. (Fig 13.3)
- Semi-automatic- These machines have two tubs. These machines require the intervention of the person washing clothes, periodically. The rinse water has to be filled into the machine and then drained out with each cycle. (Fig 13.4)
- Fully automatic machine- In these machines, the washing, rinsing and squeezing of the garments is done automatically by the machine in a single tub. It does not require the intervention of the person once it is set. All controls for water filling, heating to a certain temperature, wash cycle, and number of rinses are set once, and then garments are put in the machine. The machine turns off automatically after a certain time. (Fig 13.5)

7. Operations performed by Fully Automatic Machine

A fully automatic machine has the following operations.

- Filling up water
- Water level control (automatic or manual operation)
- Regulation of water temperature - There is a panel or a button to control the water temperature of the machine. This button helps in selecting the desired temperature of water. Water temperature may be the same or different for washing and rinsing clothes.
- Washing- All washing machines operate on the same principle "to keep the fabric in movement in soapy or detergent water to remove dirt from them"



- Agitation: It is used in top-loading machines. It consists of blades, which either rotate (move in one direction) or oscillate (rotate in both directions). The clothes swirl rapidly with water and are cleaned.
- Pulsation: It is also used in the top loading machine. In this, the movement of water is done by a vertical device, which rapidly moves vertically and cleans clothes.
- Tumbling: It is used in front loading machines. Washing takes place in a horizontally placed cylinder which is perforated and which revolves in a partially filled tub. With each revolution the clothes are carried to the top and then dropped in the wash water. This means that the clothes move through the water rather than water moving through clothes as in previous two types. The agitators are made of plastic, aluminium or bakelite, depending on the size of the machine and the type of fabric to be washed. These materials are not adversely affected by bleaching agents and softeners. The speed of the agitator can also be controlled depending on the fabric.



13.6 Drier



13.7 Calendering Machine

IRONING EQUIPMENTS

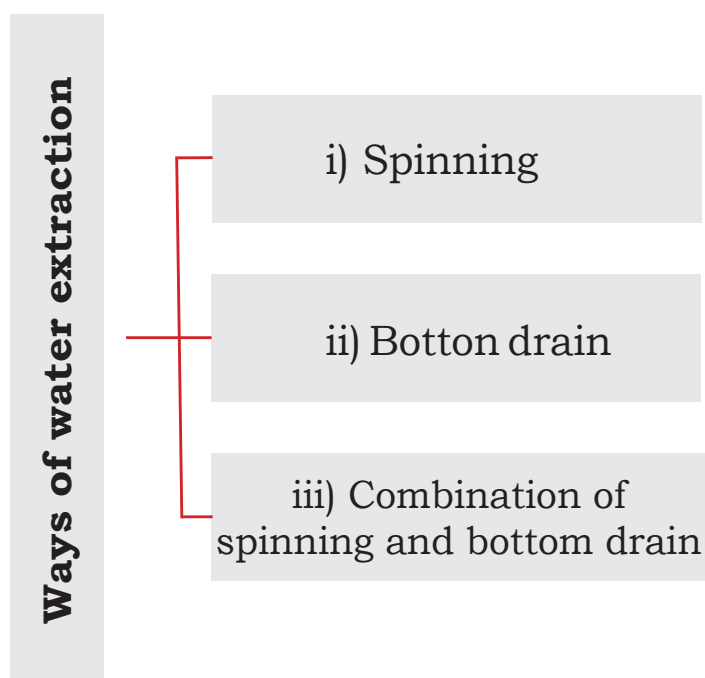


13.8 Electric Irons



13.9 Charcoal Iron

- v. After washing, clothes are rinsed with water to remove detergents and soaps etc. from them. Otherwise the clothes may look grey and dull and have a harsh texture.
- vi. Water extraction: Water is extracted after the wash phase and after each rinse phase of the cycle. This can be done in three ways-



- Spinning: Spinning at speeds exceeding 300 revolutions per minute (rpm) produces a centrifugal force, which draws water out of the clothes. This water is released into the drain by the pump.
- Bottom drain: Machines with perforated tubs stop at the end of wash phase and then at the end of the rinse process. The water filled in the tub of the machine is discharged through the bottom. At the end of the drain period the tub spins rapidly, which removes the remaining water from the clothes.

- Combination of spinning and bottom drain: Some machines drain through the bottom without stopping that is the bottom draining occurs during the spin period. This is the best method of removing water from the machine. This also removes the suspended dirt in the water as well.

The Spinning speed of the tub can range from 333 to 1100 rpm. It affects the amount of water removed from the clothes. The optimum speed of rotation is approximately 600 to 620 rpm.

8. Drying Equipment and Process

Driers are used to dry clothes at commercial and institutional levels. (13.6)

There are two types of operations in dryers:

- i. Air of relatively low temperature is circulated at high velocity:
In this system room air enters the drier from the bottom of the front panel and passes over the heat source. Hot air passes through the clothes and then leaves through an exhaust pipe. This allows room temperature and humidity to remain normal.
- ii. Slow circulation of high temperature air. In this system, when the air enters the dryer and passes over the top of the heat source, it is pulled by a small fan through the perforations in the upper part of the dryer. This air then moves downwards through the clothes and gets out through the exhaust. The expelled air has high relative humidity.

9. Ironing Equipment

Ironing is a process that removes the wrinkles from the clothes and helps to set creases in the trouser and pleated skirts. They are mainly of two types-

- Electric ironing is done in most homes. The Irons have a smooth metallic surface which can be heated. These can weigh from 1.5 to 3.5 kg. They have an inbuilt thermostat that can adjust the temperature to suit the fabric. Some machines also have a system of producing steam while in use (Fig 13.8)
- Charcoal Irons: It is like a metal box with a lid, in which live coal

pieces are put to heat the iron. (Fig 13.9) Now a days many people are using gas operated irons.

10. Different levels of care and maintenance of garments:

1. Household Level- Washing and maintenance of daily wear clothing and small articles of daily use can be done at home.
2. Business level- For Washing of some special items and clothes, services may be hired by commercial laundry or by professionals.

- i. Professionals (Dhobis):

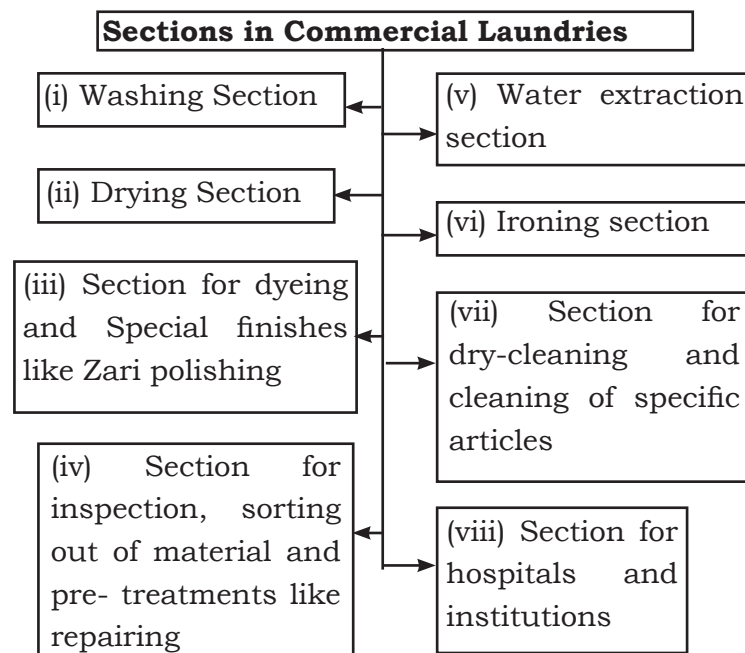
They provide services to institutions such as homes, hostels, hotels and restaurants. Dhobis wash clothes at their homes or special places (Dhobi Ghats),

- ii. Laundry or dry cleaning shops:

Here customers bring clothes to be washed and a few days later they take back washed and ironed clothes. Customers may be an individual or an institution. Some laundries also provides services of transport of material to and from the customer

- iii. Commercial Laundry:

These washing houses have different sections for different washing processes.



- These washing houses have large appliances. The washing machine has the capacity to handle 100 kg or more of load in one cycle. Other equipments include hydro extractors, driers, flatbed ironing and pressing equipment, roller ironing and calendaring machines, folding and packaging table and trolleys to carry material from one place to another.
- All commercial establishments have a system of keeping record. A receipt/invoice is given to the customer on which the number, type of cloth and the work to be done on it are written. The garment is tagged according to this receipt and this helps in identifying each customer's garment.

11. Care and maintenance of fabrics in institutions (hospitals and hotels)

The organized collection, laundering and timely delivery of processed material is very essential for the operation of an institution. There are two types of institutions which have in house laundry and maintenance setups. These are hotels and hospitals

Hospitals:

- i. The hospital laundry takes care of hygiene and cleanliness and disinfection. Many hospitals that have a higher risk of infection use disposable materials, which are destroyed by burning.
- ii. Almost all the clothes (except blankets) are of cotton. They are of white colour or dyed in fast colours (specific to hospital or its department).
- iii. In hospital laundry removal of stains and other special finishes such as starch, whitening or ironing etc. are not given special attention. Repair and mending and condemnation of the material may or may not form a part of the services required.
- iv. Steps in the process of laundry functioning in hospitals
 - Collection of dirty clothes from various departments of the hospital
 - Transportation to the laundry plant
 - Sorting of dirty linens (bed linens, patients dress, doctor's dress, blankets etc.)

- Washing clothes
- Water extraction
- Drying of clothes
- Pressing, ironing, folding and stacking
- Repairing if needed
- Disposal of unusable content
- Packing clean clothes
- Distribution of clean clothes in relevant departments

Hospitality sector or hotel

- Aesthetics and final finish of the garments and the articles are the most important.
- As compared to hospitals, the articles here may be of different fibre contents.
- Special emphasis is laid on final finishes of laundered garments such as starching, pressing, folding, etc.
- Washing of personal clothes of the guests is also to be taken care of, when required.

12. Washing capacity in institutions

- The number of clothes to be washed is much more in the hospitals as compared to hotels
- A large hotel may have up to 400 to 500 rooms whereas a hospital may have to take care of 180 to 2000 beds or even more.
- The sheets in operation theatre, maternity ward, delivery room, may require five or more changes per day.
- Linen requirement in stock is a minimum of 6 sets per day. Each set consists of a bed sheet, a draw sheet and a pillow cover.
- The blankets are not changed daily. But these are also kept in extra quantity in the store house.
- Apart from these, there may be clothes of the patient, doctor's dress and some common materials like tablecloth, curtains etc. As in the case of commercial laundries there is a system of keeping record for collection and disbursement of material to each department.

13. The example is given below.

S. No.	Name of the clothing	No.	Remarks
1	Bed Sheet		
2	Draw Sheet (white)		
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			

14. Preparing for a career

Primary Requirements:

- Knowledge of the material i.e. its fibre content, quantity of yarn and fabric production technology and the colour and finishes applied, in terms of the effect of care required
- Knowledge of the processes involved.
- Knowledge of chemicals and reagents used in various processes and their effect types of fabrics.
- Practical knowledge of requirements of machines and their functioning.

Educational Qualifications

- Short Term Courses in laundry Management: Through these courses, practical training is imparted in high tech laundry

houses along with training, job placement assistance, assistance for business start-up etc.

- ii. Practical training or internship in various institutions such as airline companies, ships, railways, hotels, hospitals etc.
- iii. Graduate degree courses in textile science, textile chemistry, textiles and apparel are also available in several universities.

15. Scope

- i. Entry into entrepreneurial activities.
- ii. Service in Nursing Home, small hospital, day care centre etc.
- iii. Jobs in various positions in hitech laundries of big institutions like railways, airlines, shipping companies, hotels, hospitals.

Some important definitions:

- 1. Dry cleaning: Washing of wool, silk, ryan and some special or expensive fabrics is done with organic solvents instead of water. This is called dry cleaning or anhydrous washing
- 2. Calendring: This is a process in which the cloth is passed through large hot rollers under high pressure.
- 3. Disinfection: The process of destroying microbes is called disinfection. This action can be done with high pressure, heat or chemicals.

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice questions

- 1. What is the main principle of washing clothes, in a machine?
 - a. To keep the cloth in movement in washing solution
 - b. Filling of water in the machine.
 - c. Setting the control of the machine.
 - d. To put a good detergent in the machine for removing dirt

Ans- a To keep the clothes in movement in washing solution

- 2. Which method of washing is used in front-loading machines?
 - a. Agitation
 - b. Pulsation
 - c. Tumbling
 - d. Spinning

Ans- c Tumbling

3. What is the optimum speed of spinning for washing clothes?

- a. 300-350 rpm b. 500-530rpm
- c. 900-1100rpm d. 600-620rpm

Ans- d 600-620rpm

4. Which fabric is most used in hospital clothing?

- a. Cotton b. Silk
- c. Woollen d. Synthetic

Ans- a Cotton

5. Spinning at speeds greater than 300 rpm generate which force in washing machines?

- a. Centrifugal force b. Gravitational force
- c. Regional force d. Magnetic force

Ans- a Centrifugal Force

(B) Match the following

- | | |
|---------------------|--|
| A. Agitator | i. smoothening out wrinkles |
| B. Ironing | ii. method of washing clothes |
| C. Hydro extractors | iii. spinning |
| D. Dhobi Ghats | iv. specially marked place for laundry |

Pick the correct option

- a. Aii, Biii, Ci, Div b. Aii, Bi, Ciii, Div
- c. Aiii, Bii, Civ, Di d. Ai, Bii, Ciii, Div

Ans- b. Aii, Bi, Ciii, Div

(C) Fill in the blanks

1. The operator has to do 50% or more of the work in_____ washing machines.
2. The speed of_____ in a washing machine can be changed depending on the type of fabric.
3. In commercial laundry establishments _____ on clothes helps to identify the items of each customer.
4. In electric iron _____ helps to adjust the temperature to suit the fabric.

Ans- 1 Manual washing machines

2 agitators

3 code tags

4 thermostat

(D) Identify the following picture and write one of its features.

Ans- This is a picture of a commercial washing machine. These have a capacity of washing up to 100 kg weight or more in one cycle.



(E) Very Short Answer Questions (1 mark)

1. What are the aspects of care and maintenance of fabrics?

Ans-1 The care and maintenance of fabrics includes two aspects;

- a. To keep the material free from physical damage and to rectify any damage that may have occurred during its use.
- b. To retain the visual appearance and textural characteristics of clothes.

2. How many types of models are available in washing machines? Name them.

Ans- Two types of models are available in the washing machine:

- a. Top-loading, in which clothes are put in the machine from above.
 - b. Front loading in which the clothes are filled from the front.
3. How do we clean large items of household linen or some special garments?

Ans-We do not wash the silk, wool or some special clothes at home. We get them cleaned in the laundry where their cleaning is done with organic solvent i.e. dry-cleaned

4. Write the names of any two methods of keeping the clothes moving in the washing machine

Answer 1 Agitation

2 Pulsation

Case study based questions (1mark X 4)

Institutional laundries are organized in different departments. Each part deals with a specific task, such as-washing, drainage, drying, pressing. Some laundries may have separate sections for hospitals and institutions and for personal work of individuals. Most laundries have separate unit for inspection, sorting, segregation and pre-treatment for stubborn spots.

1. After washing and rinsing, the process of removing water from clothes is known as
- | | |
|--------------|---------------------|
| a. Pulsation | b. Tumbling |
| c. Spinning | d. water extraction |

Ans- d water extraction

2. If the clothes are not rinsed properly with water after washing, they appear
- | | |
|-----------------|------------------|
| a. White, harsh | b. grey, harsh |
| c. yellow, hard | d. yellow, dense |

Ans- b grey, harsh

3. What are the individual professionals who collect clothes from home for washing or ironing are known as?
- | | |
|-----------------|------------|
| a. Dhobis | b. Mistry |
| c. Entrepreneur | d. Washers |

Ans- a Dhobis

4. Which of the following options is correct?
- | |
|---|
| a. The amount of laundry work is more in hotels than in hospitals. |
| b. Some washing machines drain water from the bottom without stopping and this is the best method of drainage. |
| c. Aesthetic care, health, hygiene and disinfection of garments are taken care of in the washing house of the hospital. |
| d. In the field of clothing care, practical training is not required to make a living. |

Ans- b. Some washing machines drain water from the bottom without stopping, and this is the best method of drainage.

Short answer questions (2 marks)

1. Write any four factors that affect the process of cleaning of clothes.

Ans- i. Type and content of fibres and yarns

ii. Fabric manufacturing techniques

iii. Finishes given to the fabrics

iv. Purpose of use of fabric

2. "Washing of clothes is both a science and an art." Discuss this statement.

Ans- Washing of textiles is a science, as it is based on the application of scientific principles and techniques. This is an art, as it is necessary to have mastery of the respective skills to achieve aesthetically interesting results.

3. What do you understand by the dry cleaning shops (waterless washing shops?)

Ans- In the dry cleaning shops, people give some special clothes for cleaning. Here the customers give clothes to be washed, and after a few days they take back the washed clothes. These customers can be any person or an organization. Some washing houses also provide service to collect and deliver materials from the customer. These also serve small institutions like small hotel, hostels, restaurants and nursing homes. Some shops also have units for pre-treatment such as darning, repairing and dyeing of textiles.

4. Write the names of any 4 appliances used in commercial washing houses.

Ans- 1 Large washing machines

2 Water extractors

3 Dryers

4 Ironing equipment

6 Calendaring machine

7 Trolley to move from one place to another

Short answer question (3 marks)

1. What are the primary requirements in a person who wants to earn a livelihood in the care and maintenance of clothes?

Ans- A person desirous of earning a livelihood in the care and maintenance of garments should have knowledge of the following primary requirements:

- i) Knowledge of types and content of fibre, yarn, textile production technology, dyeing of fabrics and other fabric finishes for necessary care of garments.**
 - ii) Knowledge of functioning and care of machines involved.**
 - iii) Knowledge of chemicals and reagents used in various processes and their effect on different types of textiles**
2. Which clothing items need to be washed and maintained in a hospital?

Ans- 1 Clothes like bed sheets, draw sheets, blankets etc. of hospitals.

2 Clothes of employees or uniform

3 Furnishings of rooms of hospitals

4 Aprons, caps, head costumes, masks

5 Dresses of patients in hospital

6 Kitchen clothes.

7 Some other materials like curtains, tablecloths etc.

3. What are different methods used for water extraction in an automatic washing machine?

Ans- Water extraction Water is extracted after the wash phase and after each rinse phase of the cycle. This can be done in three ways-

- i. Spinning: Spinning at speeds exceeding 300 revolutions per minute (rpm) produces a centrifugal force, which draws water out of the clothes. This water is released into the drain by the pump**
- ii. Bottom drain: Machines with perforated tubs stop at the end of wash phase and then at the end of the rinse process.**

The water filled in the tub of the machine is discharged through the bottom. At the end of the drain period the tub spins rapidly, which removes the remaining water from the clothes.

- iii. Combination of spinning and bottom drain: Some machines drain through the bottom without stopping that is the bottom draining occurs during the spin period. This is the best method of removing water from the machine. This also removes the suspended dirt in the water as well**

Long Answer Questions 4 marks

1. What is the function of a dryer in a machine? Describe its different methods of operation.

Ans- Refer to Points to Remember Number-8

2. Explain what are the differences in the process of laundry work in commercial laundries and laundries of hospitals.

Ans-

S.No	Commercial laundries	Laundries of hospitals
1	In commercial laundries, cleaning and maintenance of the clothes of the customers is done. The customer can be any person, hostel or institution.	In the laundries of hospitals, only the clothes of that hospital, the clothes of their patients and the employees are cleaned and maintained.
2	There may be separate sections for dry-cleaning of silk, woollen and other expensive textiles and for specific items such as washing of carpets, brocade polish of fabrics, dyeing etc.	Most of the material here is made of cotton cloth. There may be sections for different departments of hospitals.
3	Special attention is paid to the ironing and packing of garments.	No special attention given to ironing and packaging of the garments.

4	The disinfection of the materials is not given much importance. Special attention is paid to the cleanliness of the spots and the aesthetic sense of the garment.	Here emphasis is not given to remove tough stains, but special care is taken for the hygiene of clothes and also disinfection.
---	---	--

Long answer questions (5 marks)

1. Make a record keeping format related to the distribution of clothes in professional laundry.

Ans- Refer to Points to Remember No. 13

2. What are the different types of Washing machines? Briefly write the working of a fully automatic machine. Which materials are commonly used for making agitators in washing machine and why?

Ans- Refer to Points to Remember No. 6

Agitators of the washing machine are made from materials such as plastic, aluminium or bakelite. These substances are not affected by different types of detergents, bleaching agents, softeners etc.

PRACTICE QUESTIONS

OBJECTIVE TYPE (1 MARK)

(A) Multiple Choice Questions

1. Which of the following methods of water extraction is the best?
 - a. Spinning.
 - b. Bottom drain.
 - c. Combination of bottom drain and spinning.
 - d. Combination of tumbling and spinning.
2. Which of the following metals is used for making agitators of washing machine?
 - a. Iron
 - b. Aluminium
 - c. Steel
 - d. Copper
3. large washing machines in institutions have the capacity of washing _____. or more in one cycle.
 - a. 80 kg
 - b. 20 kg
 - c. 50 kg
 - d. 100 kg

4. In the washing machine which have water extractors working on the principle of high-temperature air operating at a slower speed the expelled air has high_____.
- a. Humidity b. Temperature
c. Speed d. Pressure

(B) Match the following

- | | |
|------------------------------|---|
| A) Institutional laundries | i. Washing and disinfection of Cotton Fabrics |
| B) B) Laundries of hospitals | ii. Special attention to the aesthetic sense of clothing |
| C) laundries of Hotel | iii. Waterless washing of silk, woollen and special items |
| D) Dhobi Ghats | iv. Washing and ironing of garments at specific place. |

Pick the correct option

- a. Aiii, Bi, Cii, Div b. Ai, Bii, Civ, Diii
c. Aii, Biii, Ci, Div d. Aiii, Bi, Cii, Div

(C) Fill in the blanks:

1. _____ machines usually have two tubs.
2. Washing with tumbling is done through a perforated cylinder kept in the_____ state
3. Spinning speed in the washing machine can be up to_____
4. The area of care and maintenance of fabrics is a_____ area.
5. For the interiors of some institutions, special fabrics with_____ and _____ resistant property are used for industrial purposes.

(D) Picture based question

1. Identify the following picture and write a feature of it.



(E) Very short question (1 mark)

1. Write down any two specific properties of the fabric for curtains in a hotel.
2. If the clothes are not thoroughly rinsed after washing, how will it affect them?
3. Which method of water extraction is the best in a machine?
4. What is the principle on which a washing machine works?

Case study based questions (1 mark x 3)

Most household have an iron and there is a permanent or temporary place for work. Ironing is a process of smoothening out wrinkles created with use or during washing pressing helps to put crease to flatten the folds that occur when using or washing clothes. Pressing helps to set creases on the arms of the dress, on the pant, and in a pleated skirt.

1. What is the benefit of having a suitable speed of spinning in a washing machine?
 - a. There are no wrinkles in the clothes.
 - b. Clothes get dried well.

- c. The clothes are cleaned well.
 - d. The texture of clothes remains fine
2. The weight of an iron can be from _____ to _____
- a. 1.5 to 3.5 kg
 - b. 2.0 to 4.0 kg
 - c. 3.0 to 5.0 kg
 - d. 1.0 to 2.0 kg
- Or
- _____ requires heavy irons.
- a. Sheet
 - b. Saree
 - c. Shirt
 - d. Trousers
3. In fully automatic machines, approximately _____ moisture is extracted from the fabric
- a. 100%
 - b. 60% to 70%
 - c. 20% to 30%
 - d. 90%
- Or
- In an electric iron, the temperature is adjusted by
- a. Thermostat
 - b. Capacitor
 - c. Element
 - d. Metallic surface

Short answer question (2 marks)

1. What is the difference between spinning and bottom drain?
2. How are the garments of the customers identified in the institutional laundries?
3. How many sets of sheets are kept per bed in a hospital store and what clothes are there in each set?
4. Explain the difference between semi-automatic and hand operated machines.

Short answer question (3 marks)

1. How are different sections of an institutional laundry organised?
2. Explain the different methods for keeping clothes in motion in a washing machine?
3. Enumerate the steps of washing in a fully automatic machine.

Long Answer Questions (4 marks)

1. What are the differences in the process of washing in hospital laundry and laundry in a hospitality area?
2. Which equipment is used for drying clothes at the commercial and institutional level? Describe the various operations of this device.

Long Answer Questions (5 marks)

1. Describe the various stages of the process of washing clothes in a laundry of a large hospital.
2. Your friend wants to set his career in the Care and maintenance of fabrics. Guide him by stating primary and educational requirements essential for it.

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14. HUMAN RESOURCE MANAGEMENT

‘POINTS TO REMEMBER’

1. **Human Resource Management**– Human Resource Management is an important field of study that emerges out of Resource Management which has an impact on efficiency of an individual and organisation.
2. **Human Resource Development**– Human Resource Development is a process of increasing the knowledge, skill and capacities of the personnel in the organisation. It is also a process of getting the best out of the members.
3. **Recruitment**– Recruitment is determining the best candidate for the 'job' from among the numerous applicants by arranging interviews, tests and verification of documents and references.
4. **Selection**– Selection means appointing suitable and appropriate staff.
5. **Training**– Training is the systematic development of attitudes, knowledge, skill required by a person to perform a given tasks or job adequately.
6. **Development**– Development is the growth of the individual in terms of ability, understanding and awareness.
7. **Job Analysis**– It is the process used to collect information about the duties, responsibilities necessary skills, outcomes and work environment to perform a particular job.
8. **Personnel Department**– In the past, large organisation had a 'Personnel Department' which was largely responsible for hiring people, maintaining paper work and paying the employees.
9. **Human Resource Department**– Personnel Department was later on replaced by Human Resource Department which played a major role in selection, staffing, training and helping the workforce to improve capability and achieve better performance.

10. Human Resource Management as a strategic and Coherent approach–

- Human Resource Management is concerned with getting better results with the collaboration of people.
- focusses on people's issues.
- Refers to all of the activities implemented and used to affect behaviour of employees.
- It helps in attaining maximum individual development by providing desirable working conditions.
- It helps in improving relationship between employees and employers as well as among the employees themselves.

11. Aim of Human Resource Management– Aim of Human Resources Management is to ensure that productivity of the organisation is maximised through improving work life of the employees, treating them as vital and critical resource and helping them to be as effective as possible.

12. Major functions of Human Resource Management.

i. Recruiting and Staffing–

- The first step is to take a satellite picture of the existing work force profile number, skills, ages, flexibility, gender, experience, forecast, capabilities, character, potential etc. of existing employees and then to assess needs for 1,5, and 10 years ahead. Before recruitment the first step is to do job analysis.
- **Main Purpose of Job Analysis–**
 - To Prepare job description and job specification
 - To document the recruitments of a job and the work performed
 - To determine the actual number of manpower needed.
 - To determine the skills that manpower should have.
- **Job description–** The information from the study of job analysis are written into a job description. Based on this the company

decides the number of positions at various hierarchical levels, the number of person per position, develop recruitment plans and advertise the posts.

- **Important tasks of the Human Resources Professional-**
 - To determine what physical and mental characteristics applicants must possess.
 - What qualities and attitudes are desirable
 - What characteristics are decided.
- **Focus of Human Resource Management**
 - Personal development
 - Employee satisfaction
 - Compliance with regulations.
- **Process of Job analysis**
 - Describing a job
 - Developing performance appraisals.
 - Selection systems
 - Promotion criteria
 - Training needs assessment
 - Compensation plans
- **Selection and Recruitment of work force/Employees.**
 - Main role of Human Resource Professionals is to attract talented staff and motivate them to join the organisation and recruit them.
 - Human Resource Professionals are hired in placement agencies.

ii. TRAINING AND DEVELOPMENT

- **Training and development is necessary in order to-**
 - Develop workers to undertake higher grade tasks.
 - Provide the conventional training to new workers.
 - Raise efficiency and standards of performances.

- Meet legislative requirements (e.g. health and safety)
- Inform and acquaint persons/acclimatisation process for new employees.
- **Motivating and Monitoring**– An organisation needs to constantly take stock of its workforce and to assess its performance in existing jobs for 3 reasons:
 - To improve organisational performance through encouragement of employees for the individual performance.
 - To identify potential i.e. to recognize existing talent and utilizes the same to fill other vacancies in the organisation or to transfer individuals into jobs where better use can be made of their abilities.
 - To provide an equitable method of linking payment to performance.

iii. Ensuring compliance to Regulations and safe Equitable work Environment.

This involves–

- Compliance with the laws and regulations of the government and municipality.
- Interaction between the management and the union.
- Employee behaviour and discipline.
 - Efforts are made to charge employee behaviour in case of indiscipline.
 - Incentives may be given for good behaviour.
 - HR professionals work with trade unions.
 - They develop policies and handle issues such as sexual harassment, theft, misbehaviour.
 - They administer programmes to enhance communication and cooperation among employees and management.
 - There are regulations related to occupational safety and health, environmental protection, workers compensation in case of accident/ injury/death.
- **Paying Employees and Providing Benefits –**
 - The Human Resource Management department develops

salary systems, employee quality, retention, satisfaction and motivation (bonus) etc.

- Rewards/recognitions may be given for good work. Moral of all the employees has to be kept high.
- Benefits given to employees under Human Resource Management Department–
 - Retirement benefits
 - Pensions
 - Gratuity
 - Provident fund
 - Retirement Investment plans
 - Tax Incentive.
 - Health benefits e.g. life insurance.
 - Vacations
 - Leave
 - Employees ownership of company shares.
- Sustaining High Performance Employees.
 - Employees whose performance is good need to be sustained. In different companies, different, strategies are used to sustain such person.
 - Offer rewards
 - Compensation packages in terms of financial incentives.
 - In kind such as paid holidays
 - Financial packages for children's education wardrobe basket.
 - Benefits like expensive cars.
 - Financial compensation in terms of driver's wages, petrol costs, medical expenses.
 - Positive work environment is provided not just on a daily basis but also in terms of celebration of festivals for persons of all religious denominations, organising get-together, picnics, social clubs for wives, among many other activities.

iv. Retention and Redressal of Employees-

- Human Resource officials design health and welfare schemes for staff to retain them.
- They provide specialist for health care service, counseling for people with personal or domestic problems affecting their work.
- They handle disputes, grievances and industrial action by dealing with unions or staff representatives.
- Other responsibilities are record keeping and monitoring of legislative related to taxes, leave options, pension etc.

13. Expectations from Human Resource Professionals.

- Clarity regarding goals - Human Resource professionals need to be clear about the goals of the company and work systematically to achieve them.
- **Efficiency in Time Management**– They are expected to help planning within a given time frame and identify time wasters.
- **Compare performances**– A good Human Resource Professional should compare performance of employees and analyse the behaviour of person and not individuals
- **Knowledge about the Business and Industry**– Human Resource professional should know and understand business and goals of the company to formulate effective employee schemes and policies.
- **Vision and Goal for the Department, Team and Organisation**– They should have vision for the organisation for Human Resource perspective and goals for their department and team.
- **Enthusiasm to Share/Develop/ Coach and Mentor**– They are required to help staff in changing their perception and behaviour. Human Resource officials have to be enthusiastic and positive in attitude, to the effective mentors and trainers.
- **Work Ethics/ Trustworthiness**– Human Resource Professionals need to be win the trust of the employees and then maintain that trust.

14. Need for Human Resource Management and Human Resources Management Courses–

- People with good human resources management skills are highly in demand today, making courses in this field popular among learners.
- While recruiting the right kind of manpower is important for the successful running of a company, managing the existing human assets is also a great concern today. Thus, organisations need efficient professionals trained in management of human resources.
- Human Resource Management courses are offered at both degree and diploma level by various universities, deemed universities, private colleges and other institutes.
- **Area of Human Resource Management.**
 - Candidates pursuing a post graduate Human Resource Management Course will gain insight into areas like-
 - Training and Development.
 - Perspectives of Management
 - Employee Compensation management
 - Labour welfare and Social security
 - Human Resource Management
 - Organisational Behaviour

15. Options for Professionals.

- **Corporate Human Resource Management–** The role of a Human Resource Manager in the corporate sector is to search, select and recruit suitable qualified staff for the organisation. A bachelor's degree in management allows entry into a junior cadre of Human Resource Management.
- **Training and Development–** The job of the Training and Development Team is to train Human Resource Managers who in turn train employees of their organisation. They often hold workshops on behavioural skills.

- **Recruitment Consulting**– The general requirement to become a recruitment consultant is an MBA with specialization in Human Resource.

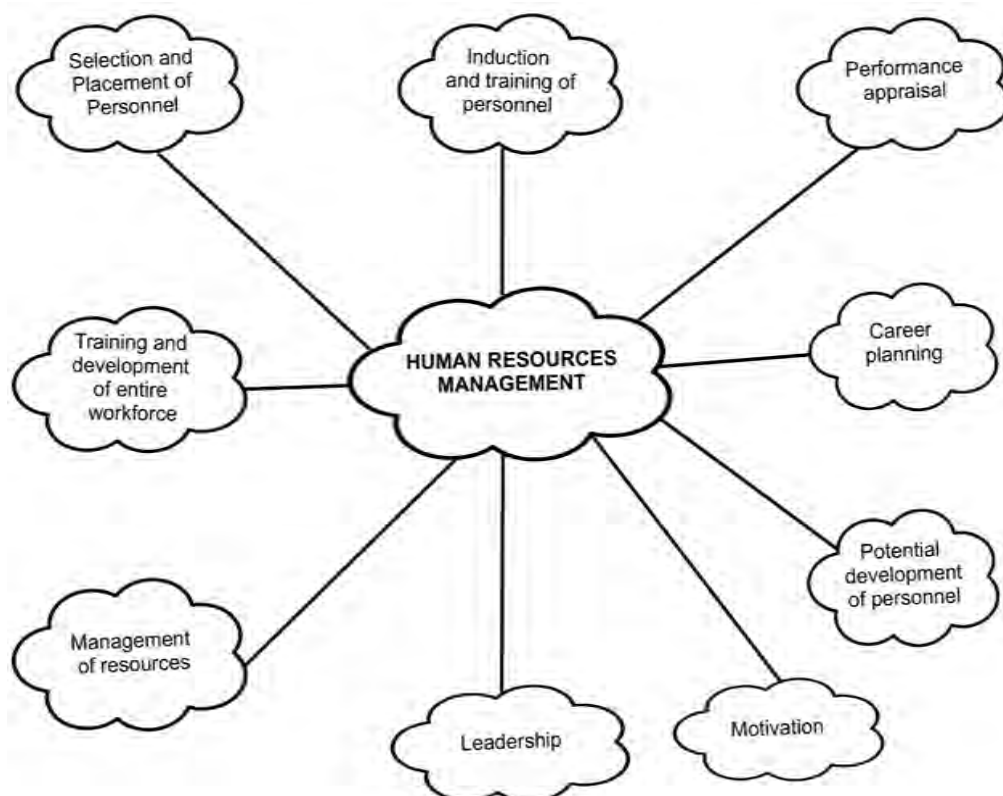


Fig. (a)

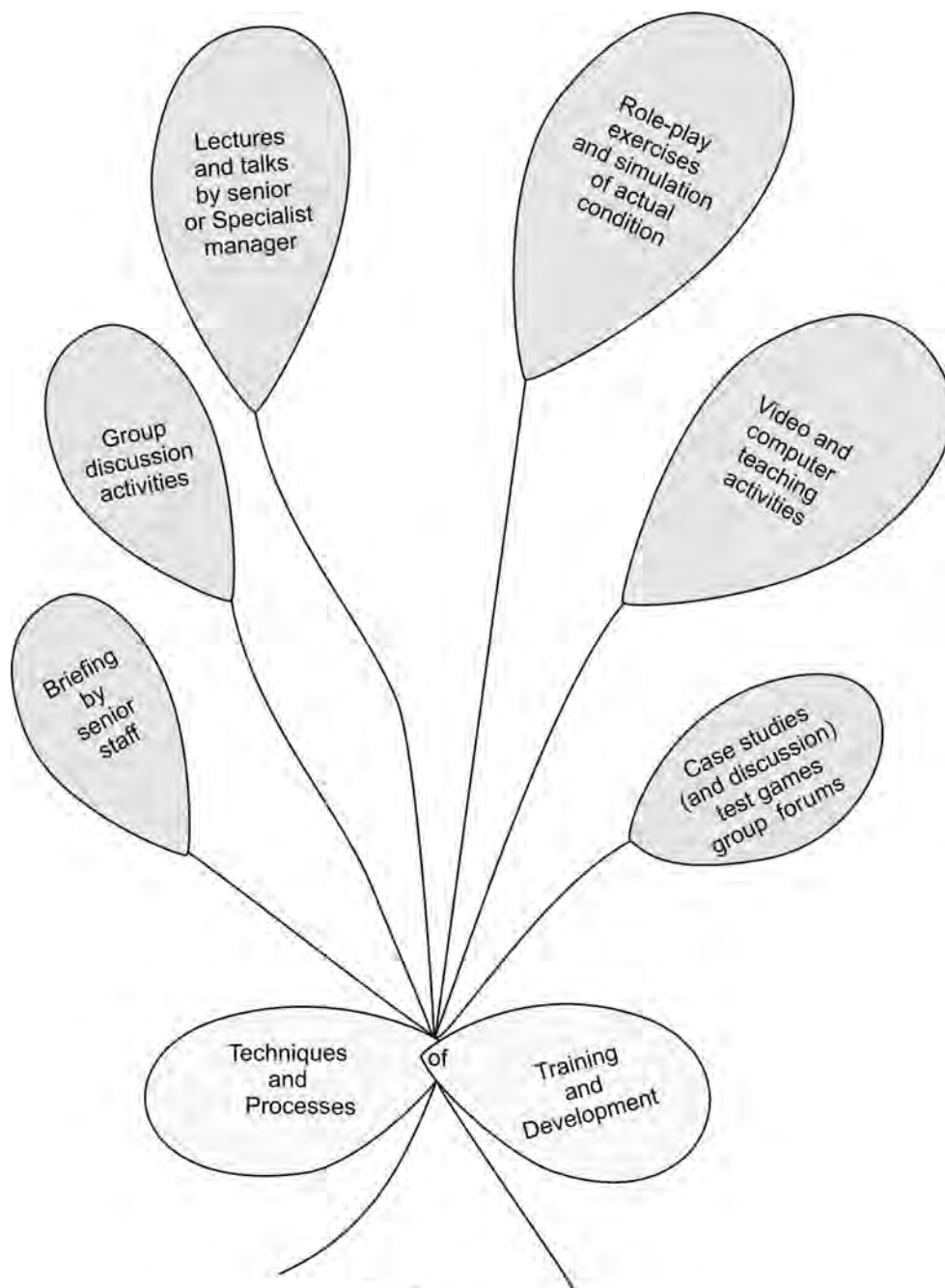


Fig. (b)

- **HR Consulting**– Organisation employ the services of the consultants to find solutions or help tide over issues relating to people in the organisation.

HR consultants decide who need to be retained, terminated/services discontinued or promoted.

- **Career Counseling** The field includes the paid services of private organisations, schools/college that provides career counseling to their students by conducting behavioural tests.
- **Academic Institutions**- If a person is keen to teach Human Resource then a post graduate degree in Human Resource, Training and development or Doctorate in the same field would make him eligible to teach Human Resources.

OBJECTIVE QUESTIONS (1 MARK)

(A) Multiple choice questions

- Why incentives are given to employees in an organisation?
 - For positive work environment
 - To reward for good performance
 - To distinguish between employees
 - (a) and (b)

Ans. (a) and (b)

- On what basis the company decides the number of positions, the number of persons per position, develop recruitment plans-
 - Job analysis
 - Job description
 - Job satisfaction
 - Job planning

Ans. Job description

- What are the key responsibilities of Human Resource Development?
 - Career Counselling
 - Career guidance
 - To get work done
 - (a) and (b)

Ans. d) (a) and (b) both

4. Who takes care of health and welfare schemes, record keeping, benefits of employees?

- a. Director of company b. Human Resource Professionals
- c. Clerical staff d. Receptionist of company.

Ans. (b) Human Resource Professionals

B) Match the following

- | | |
|------------------------------|---|
| A) Human Resource planning | i) Grievances and redressals |
| B) Recruitment and staffing | ii) Job analysis |
| C) Legalities | iii) Determination of salary and benefit packages |
| D) Compensation and benefits | iv) Attracting talent |

Pick the correct option-

- a) A - i), B - iii), C - iii), D - iv)
- b) A - ii), B - iv), D - i), D- iii)
- c) A - iii), B - i), C - iv), D - ii)
- d) A - iv), B - ii), V - iv), D - iii)

Ans.- b) A - ii), B - iv), C - i), D - iii)

(C) Fill in the blanks

- 1. In the past _____ was responsible for hiring people.
- 2. In human Resource planning, the first step before recruitment is to do _____
- 3. The information from analytical study of the tasks to be performed are written into _____
- 4. _____ and _____ consists of guiding and directing members of the work force to enhance their knowledge.

Ans.

1. Personnel Department
2. Job Analysis
3. Job description.
4. Training and Development

(D) Very Short Answer Question -

1. Name the term used to refer activities of Human Resource professionals in recent times.

Ans. Talent Management

2. On which the overall performance and profitability of any organisation is largely dependent?

Ans. The overall performance and profitability of any organisation is largely dependent on the quality of its manpower

3. What are the benefits given to employees?

Ans. Retirement benefits, Pension, Gratuity, Provident fund, Retirement investment plans, Health benefits etc.

4. Whose services are used by schools and colleges to conduct behavioural tests for students who are on the verge of choosing a career stream?

Ans. Career Counsellors.

Case Study Based Questions (4 × 1Marks)

Manpower or human resource planning is concerned with assessment of present and future needs of the organisation in relation to present resources and future predicted demand and changes. Appropriate steps are then planned to bring demand and supply of manpower into balance. Thus the first step is to take a 'satellite picture of the existing workforce profile and then to assess needs for 1, 5 and 10 years ahead.

1. Name the process used to called information about the duties, responsibilities, necessary skill, outcomes, and work environment to perform a particular job.
 - a. Job analysis b. Job description
 - c. Work analysis d. (a) and (b)

Ans. (a) Job analysis.

2. What is the main purpose of job analysis?
- a. Job description b. Job specification
 - c. (a) and (b) d. Work analysis

Ans. (c) (a) and (b) both

3. What is the first step before recruitment?
- a. Job analysis b. Advertising for a job
 - c. Identifying suitable employee d. Recruiting suitable employee

Ans. (a) Job analysis.

4. What of the following statement is incorrect
- a. An important concept of job analysis is that the analysis is conducted of the person.
 - b. Job-analysis determines the actual number of manpower needed.
 - c. Job analysis determines the skill that manpower should have.
 - d. Job analysis is performed as a basis for defining a job domain.

Ans. a) An important concept of job analysis is that the analysis is conducted of the person.

Short Answer Questions (2 Marks)

1. What is the role of Human Resource Department?

Ans. It played a major role in selection, staffing, training and helping the workforce to improve capability and achieve better performance.

2. What is the main aim of Human Resource management?

Ans. The main aim of Human Resource Management is to ensure that productivity of the organisation is maximised through improving work life of employees, treating them as a vital and critical resource helping them to be as effective as possible

3. What are important tasks of the Human Resource professional?

Ans. The important tasks of the Human Resource professional are -

- i. To determine what physical and mental characteristics applicants must possess
 - ii. What qualities and attitudes are desirable and what characteristics are needed.
4. What is the main purpose of Job analysis?

Ans. i. To prepare job description and job specification.
 ii. To document the requirements of a job and the work performed.
 iii. To determine the actual number of manpower needed.
 iv. To determine the skills that manpower should have.

Short Answer Questions (3 Marks)

5. Why Training and Development is necessary in an organisation?

Ans. Training and development is necessary in order to-

- i. Develop workers to undertake higher grade tasks
- ii. Provide the conventional training to new workers.
- iii. Raise efficiency and standards of performance.
- iv. Meet legislative requirement (eg. health and safety)
- v. Inform and acquaint person/acclimatisation process for new employees.

2. What do you understand by motivating and mentoring the employees in an organisation?

Ans. An organisation needs to constantly take stock of its workforce and to assess its performance in existing jobs for three reasons.

- i. To improve organisational performance through encouragement of employees for the individual performance.
- ii. To identify potential i.e. to recognise existing talent and utilise the same to fill other vacancies in the organisation or to transfer individuals into jobs where better use can be made of their abilities.
- iii. To provide an equitable method of linking payment to performance.

3. Write about the efforts that good organisations make to sustain

high performance employees.

Ans. In different companies, different strategies are used to sustain high performance employees.

- i. Offer rewards.
- ii. Compensation packages in terms of financial incentives or in kind such as-
 - Paid holidays for the entire family
 - Financial packages for children's education
 - Wardrobe basket.
 - Benefits like expensive cars
 - Financial compensation in terms of driver's wages, petrol casts, medical expenses
 - Housing etc.
- iii. Positive work environment is provided in terms of celebration of festivals for persons of all religions denominations, get together, picnics, social clubs for wives are organised.

Long Answer Questions (4 marks)

1. What is the role of Human Resource Professionals in Retention and Redressal of Employees?
 - i. Human Resource officials design health and welfare schemes for staff to retain them.
 - ii. They provide specialists for health care services, counselling for people with personal or domestic problems affecting their work.
 - iii. They handle disputes, grievances and industrial action by dealing with union or staff representatives.
 - iv. Other responsibilities are record keeping and monitoring of legislative related to taxes, leave options, pensions etc.
2. Briefly explain expectations from Human Resource Professionals.

Ans. Refer to Points to Remember Number-13

3. Explain the process of job analysis -

Ans. Job analysis is the process used to collect information about the duties, responsibilities, necessary skills, outcomes and work environment to perform a particular job. Job analysis is performed a basis for-

- describing a job.
- task performance
- developing performance appraisals
- selection systems
- promotion criteria
- training
- determination of requirements
- compensation plans.

Long Answer Questions (5 marks)

1. What do mean by Training and Development? What are the common techniques / processes of training and development?"

Ans. Training –is the systematic development of attitudes, knowledge, skills required by a person to perform a given task or job adequately. Development is the growth of the individual in terms of ability, understanding and awareness.

Common Techniques-

- i. Lectures and talks by senior or specialist managers.
 - ii. Groups discussion activities
 - iii. Briefing by senior staff
 - iv. Role-play exercises and simulation of actual conditions.
 - v. Video and computer teaching activities
 - vi. Case studies (and discussion), tests, games, group forums, observation, exercises and reporting techniques.
2. What are the career options for Human Resource Professionals?
- Ans.** Refer to Points to Remember Number-15
3. How can be ensure compliance to Regulations and safe equitable work environment?

Ans. Ensuring Compliance to regulations and safe equitable work environment involves

- i. Compliance with the laws and regulations of the government and municipality
- ii. Interaction between the management and the union.
- iii. Employee behaviour and discipline
 - Efforts are made to change employee behaviour in case of indiscipline.
 - Incentives may be given for good behaviour
 - Human Resource professionals develop policies and handle issues such as sexual harassment, theft, misbehaviour
 - They administer programmes to enhance communication and cooperation among employees and management.
 - There are regulations related to occupational safety and health, environmental protection, workers compensation in case of accident injury/death.

PRACTICE QUESTIONS

OBJECTIVES TYPE QUESTIONS (1 MARKS)

(A) Multiple Choice Questions.

1. Candidate pursuing a post graduate in Human Resource Development will gain insight into areas like-
 - i) Training and development ii) Perspectives of Management
 - iii) Food adulteration iv) Child development
 - a. i) and ii) b. iii) and iv)
 - c. i) and iii) d. ii) and iv)
2. In the past, large organisations had a Department which was largely responsible for hiring people, maintaining paper work and paying the employees. Name the department.
 - a. Talent Management b. Personnel Department
 - c. Counselling Department d. Health Department
3. Who organises behavioural tests?

- a. Counsellors
 - b. Recruitment agencies
 - c. Reimbursement Manager
 - d. Director of Employment
4. What is the process called to the systematic development of attitudes, knowledge, skills required by a person to perform a given task or job adequately.
- a. Development
 - b. Training
 - c. Promotion
 - d. A) and B)

(B) Match the following

- | | | | |
|----|--------------------------------|------|--------------------------------|
| A) | Recruitment of employees | i) | Information by company staff |
| B) | Training of employees | ii) | Reward |
| C) | Good performance of employees | iii) | Yoga classes |
| D) | Health of employees | iv) | Job analysis |
| a. | A (i), B (iii), C (ii), D (iv) | b. | A (ii), B (iv), C (i), D (iii) |
| c. | A (iv), B (i), C (ii), D (iii) | d. | A (iii), B (ii) C (i), D (iv) |

(C) Fill in the blanks

1. The overall performance and profitability of any organisation is largely dependent on the quality of its_____
2. The aim of_____ is to ensure that productivity of the organisation is maximised through improving work life of employees.
3. _____ is hiring an appropriate and suitable employees
4. On the basis of — does the company plan to recruit.

Very Short Answer Questions

1. By what name is resource management known in today's era?
2. What do you understand by human resource development?
3. Write two methods of training and development.
4. Why is it important to know and understand business and company goals for Human Resource Professionals

Case Study Based Questions (1 mark × 3)

After recruitment and staffing the next major function of HRS is training and development which is one of the important responsibilities of the HR department starting with conducting induction programmes for new employees. It consists of guiding and directing members of the workforce to enhance their knowledge base (learn new things), apply this knowledge and translate them into skills in order to achieve the goals of organisation and its people.

1. Training and development is necessary in an organisation to-
 - a. develop workers to undertake higher grade task.
 - b. raise efficiency and standards of performance
 - c. to acquire more salary
 - d. (a) and (b)
2. _____ is the systematic development of attitudes, knowledge, skills required by a person to perform given task adequately.
 - a. Development
 - b. Training
 - c. Recruitment
 - d. Selection

OR

- _____ is a common technique of training and development.
- a. Group discussion activities
 - b. Environment protection
 - c. Picnic
 - d. Celebrating festivals
3. Training and development in an organisation is necessary to train.
 - a. New employees
 - b. Human resource officer
 - c. Union
 - d. Staff representative

OR

_____ is the growth of the individual in terms of ability, understanding and awareness.

- | | |
|------------------|--------------------|
| a. Development | b. Training |
| c. Task analysis | d. Time management |

Short Answer Questions (2 marks)

1. What is the focus of Human Resource Management?
2. What is the main purpose of job analysis ?
3. What is the difference between growth and development?
4. How the Human Resource Management Department looks after the safety and health of the employees?

Short Answer Questions (3 marks)

1. Human Resource Management is multi faceted process. What tasks are involved in it?
2. Describe the career option in the field of human resources.
3. What are the expectations from the Human Resource Professionals?

Long Answer Questions (4 marks)

1. How the Human Resource Management Department would be responsible for paying the salaries and benefits of the employees?
2. Why and how employees are evaluated periodically by company's Human Resource department?

Long Answer Questions (5 marks)

1. What are the main functions of human resources?
2. What is job analysis? On what basis is it done?
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15. HOSPITALITY MANAGEMENT

‘POINTS TO REMEMBER’

1. In Indian culture guests are regarded as God-Like and treated accordingly, as represented in the words "Atithi Devo Bhavo".
2. In ancient times, people generally stayed with relations or friends or in 'dharmashalas'. However, in modern times the travelling to different places has increased due to various purposes, which has necessitated provision of paid services for hospitality.
3. **Significance of Hospitality Management**
 - i. Some people travel to see various places especially for experiencing different cultures, seeing heritage monuments, wild life or natural beauty.
 - ii. People travel for pilgrimage, to visit holy places and to participate in religious festivals.
 - iii. People also travel to different countries for business purposes.
 - iv. Medical tourism is also an upcoming field as people travel to seek health care.
 - v. Students also travel to different countries for studying.



Motel



Hotel

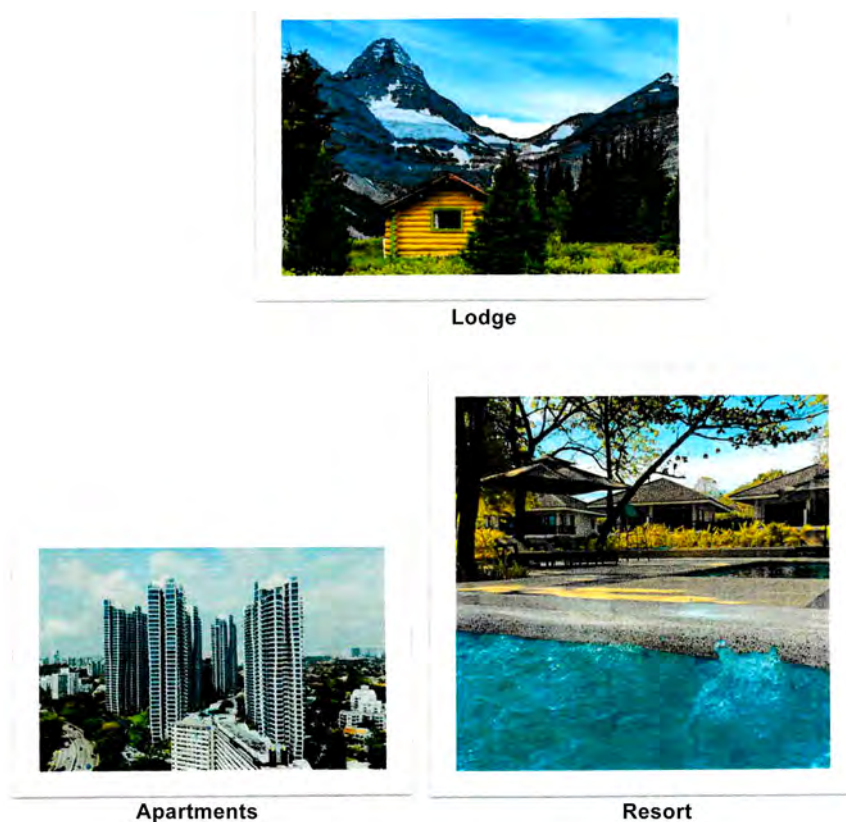


Fig. 15.1

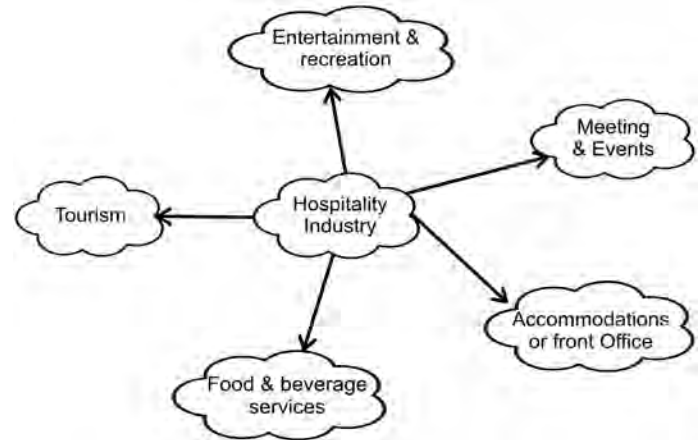
- 4. Hospitality** – Hospitality is the relationship between the guest and the host. It is the act/ practice of being hospitable including friendly generous reception /welcoming of guest their entertainment and providing services with warmth and courteousness.

Different type of establishments which offer hospitality services are-

- i. Hotel- A hotel is a commercial establishment offering lodging, meals and other services to its guests.
- ii. Motel- A motel provides services like a hotel and provides parking facility near the room or a room door that opens out into the parking lot.
- iii. Lodge- A Lodge offers rented accommodation especially for sleeping and may not offer food and other services.
- iv. Resort- It offers a broad range of amenities, sports facilities

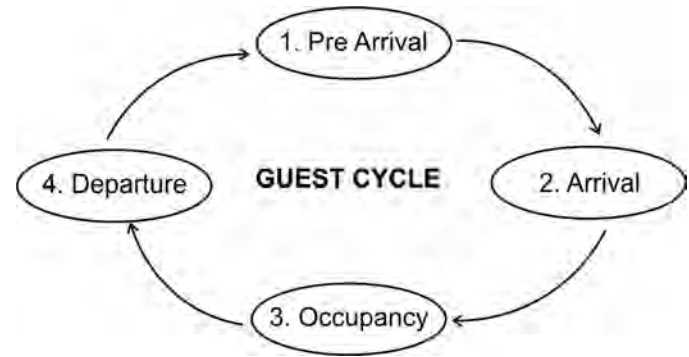
and leisure activities for ensuring a total vacation experience. A resort is known for its leisure attraction.

- v. Furnished apartments- They provide all essential amenities needed by guests
- vi. Furnished camps- These provide hospitality to people who go hiking, rock climbing, rafting and other adventure sports.
- vii. In addition to these, hospitality services are also provided at conventions, conferences, theme parks, cruise lines etc.
- viii. Hospitality services are also provided by guest houses, hostel and hospitals.



Sectors in Hospitality Industry

5. Guest Cycle – In order to understand hospitality industry. One needs to understand concept of Guest Cycle.



1. Pre-arrival stage- Following activities are carried out in this stage.
 - Quoting rates for a guest.
 - Reserving a room after the consent between guest and the hotel.
2. Arrival Stage - The guest actually arrives and register or check-in.
3. Occupancy - This stage consists of providing various services as per guest's requirements after guest moves to the room. Guest satisfaction is the main focus in order to obtain or retain customer loyalty.
4. Departure - This is the final stage of the Guest Cycle where the guest is ready to leave/move out or "check-out" the accommodation. Following activities are carried out at this time-
 - Clearance of bill by the guest.
 - Handing over the keys of the room to hotel staff
 - An up to date record of the guest is kept along with other information about the guest as 'guest history'.
 - Feed back from the guest.

6. Departments involved in Hospitality Management of an Organisation

- i. Front Office - The guest cycle falls largely under the domain of Front Office
 - The guest arrives at the front office and comes in contact with the staff of the hospitality industry.
 - The front office is the focal point of any hotel as interaction between the guest and the staff is very critical to develop good relationship between the guest and the organisation.

7. The services offered by Front Office staff are

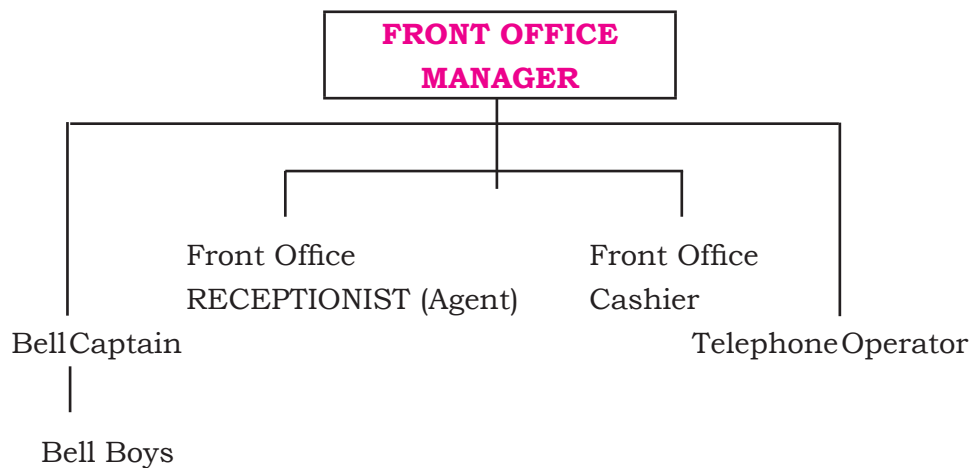
- Welcoming guests, meeting & greeting them.
- Organising reservation status of room availability.
- Registering guests and allocation of rooms.
- Maintaining records of check-in and check-out details.

- Porter services.
- Issuing room keys to the guests.
- Providing in house and external information to guests.
- Preparing and settling bills.

8. The front office staff also coordinate with various departments for providing services to the guests like-

- Transport department.
- Accounts.
- Billing.
- Room service.
- Restaurants.
- Engineering.
- Stores.
- Sales.
- Housekeeping.

9. Organisation of the Front Office Department



10. Designations and Functions/Duties of Various Personnel in the Front Office

DESIGNATION	FUNCTIONS/DUTIES
1. Front office Manager	<ul style="list-style-type: none"> • Responsible for managing the front office, lobby, transport activities. • Schedules shifts / staff rotation and duties of the staff in shifts • Checks the arrivals of the day. • Checks the arrivals of the V.I.P.'s, coordinates with housekeeping and other departments.
2. Front office Supervisor	<ul style="list-style-type: none"> • Is responsible for a shift. • Meets and greets all arrivals. • Ensures accurate and speedy rooming procedure. • Checks occupancy.
3. Front office Cashier	<ul style="list-style-type: none"> • Is responsible for maintaining guests bills. • Receiving payments when the guests check-out.
4. Telephone Operator	<ul style="list-style-type: none"> • Is responsible for providing information. • Communicates with in-houses guests and visitors.
5. Assistant Manager Front office	<ul style="list-style-type: none"> • Organises, supervises the front office in the absence of front office manager. • Ensures smooth functioning of the front office.
6. Lobby Manager	<ul style="list-style-type: none"> • Organises supervises and controls all uniformed services.

7. Receptionist (Front office Agent)	<ul style="list-style-type: none"> • Reserves registers and assign rooms to guests. • Provides information as and when necessary to guests during their stay in hotel.
8. Bell Captain .	<ul style="list-style-type: none"> • Organises, supervises and controls all uniformed services, bell boys in the lobby • Supervises all baggage movement during check-in and check-out. • Is responsible for shifting of baggage of guests within and out of the room. • Welcomes guests upon arrival and escorts them to the registration desk.

11. Housekeeping Department: Housekeeping department is primarily responsible for providing cleanliness and maintaining hygiene.

- In hotels room decor, facilities provided within the rooms, safety, cleanliness and hygiene are most important.
- House keeping department ensures the aesthetics of the entire establishment.

Nowadays, many organisations, including corporate offices, are hiring housekeeping services on contractual basis. Different departments and trained people are required for this.

i. Functions of Housekeeping Department

- Cleaning of public areas.
- Supply, upkeep of laundry and exchange of various lines and uniforms
- Flower arrangement in the hotel and maintenance of external landscape or garden
- Coordination and Communication with other departments such as front office, restaurants, engineering, accounts etc.
- Pest-control.

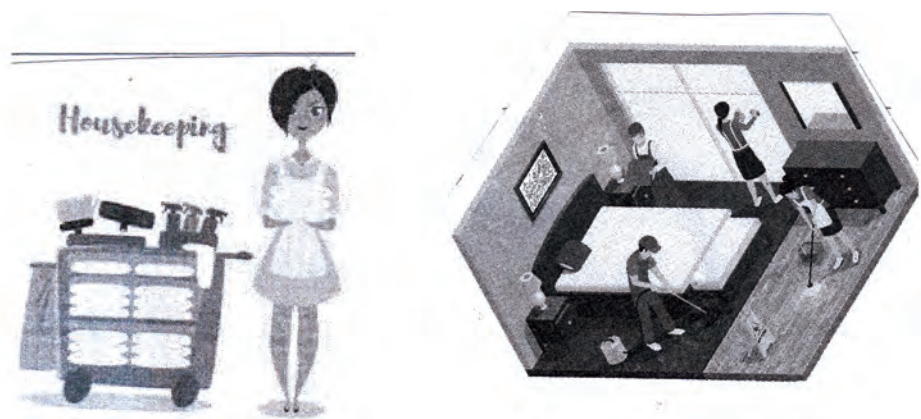


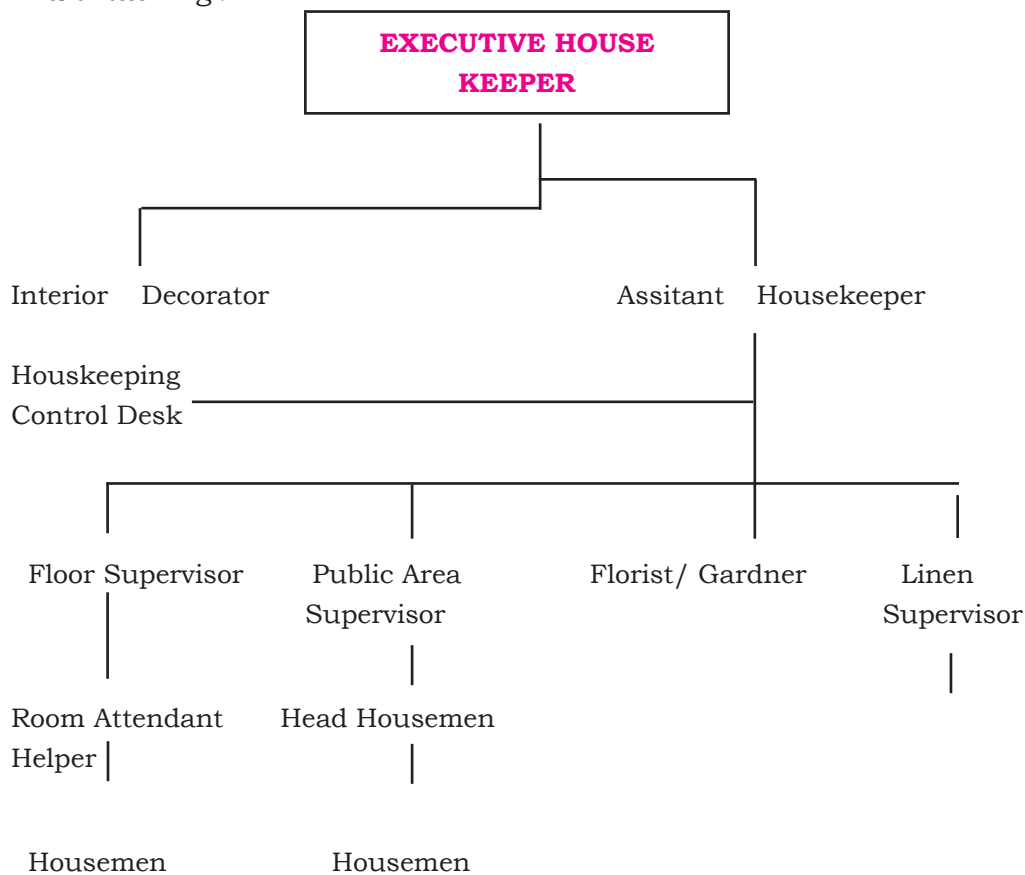
Fig. : 15.2

- ii. In order to carry out all the above functions, the house keeping department is divided into various sections.
- Housekeeping control desk - It passes on the information to housekeeping staff who are working in various parts of the hotel.
 - Housekeeping management - It plans, organises and controls all the activities of the housekeeping department.
 - Guestroom brigade- upkeeps and cleans the guest rooms.
 - Public area brigade- maintains cleanliness of foyer, lobby, front office and other common areas.
 - Linen and uniform room - coordinates with laundry, responsible for providing clean linen to establishment and uniform to all the staff.
 - Horticulture and flower arrangement team - maintains landscape of the hotel and arranges flowers in rooms and at various places.
 - Lost and found section deposits misplaced luggage of guests.

12. Staffing Pattern of Housekeeping Department

In order to run the department smoothly, it is essential to select appropriate manpower to various posts. The organisational structure

and hierarchy may vary from one organisation to other. One may appoint different, individuals in different posts on have some staff 'multi-tasking'.



General Organisational Chart of Housekeeping Department

13. Responsibility of the House Keeping Department Personnel

- i. Executive Housekeeper – He is responsible for managing the functioning of the department through judicious use of manpower, materials, money, time and other available resources. He checks schedules, cleanliness and all functioning of the housekeeping department
- ii. Assistant Housekeeper – He prepares duty schedule and checks

cleanliness and functioning of the housekeeping department.

- iii. Desk Control Supervisor – Coordinates with front office for information on departure of guests.
 - Gets vacated rooms cleaned and hands over cleaned rooms.
 - This desk should be manned 24 hrs.
- iv. Floor Supervisor - There is one supervisor for each floor, responsible for cleanliness and maintenance of guest rooms, corridors, staircase and floor pantries .
- v. Room Attendant - He does the actual cleaning of guest rooms and bath rooms.

Housemen does the heavy cleaning activities such as vacuuming, mopping, sweeping, shifting of furniture.
- vi. Public Area Supervisor - He is responsible for maintaining cleanliness of public areas such as main entrance, corridor offices, banquet halls & restaurants.
- vii. Florist/ Gardener - He maintains garden and does flower arrangement in various parts of the hotel.
- viii. Linen Room /Uniform Room Supervisor–

He is responsible for supply, acquisition, storage, issue and cleanliness the linen and uniform required in various parts of the hotel.

14. Cleaning Work in an Organisation /Hotel

- Cleaning is an integral part of an organisation /hotel. Following points are to be borne in mind.
 - Knowledge of correct cleaning procedures
 - Trained staff
 - Selection of specialised equipment, tools.
 - Selection of appropriate cleaning solutions
 - Knowledge of latest technological applications.

15. Cleaning of Various Surfaces

- Cleaning of various surfaces in the hotel is done with. suitable

tools, cleaning solutions and specific methods.

- Various materials and finishes used for walls, floor, counter tops and furniture are wood, granite, marble, ceramic tiles, stones, linoleum, plastic, vinyl, fibre glass, metals, leather, cane, rubber, cloth paints & wall papers. Different type of equipments are needed for keeping good cleanliness.
- Commonly used equipments are vacuum cleaners, brushes, brooms & mops, containers, cleaning cloth and trolleys to carry multiple equipment.
- Various cleaning agents such as water, ammonia vinegar, soaps and detergents, washing soda, abrasives, polishes, acids etc. are used for cleaning purposes.

16. Washing & Maintenance of Linen

- The linen and uniform room is an integral part of house keeping
- The laundry may be done in the department or it can be given to an outside agency.
- The linen room stores and maintains enough stock of bed linen, bath linen, linen for restaurants and uniforms of all staff members of the hotel.

17. Aesthetic Appeal of Interior Spaces of Hotel

- Flowers are used to enhance the aesthetic appeal of various interior spaces
- The organisation may give a contract to florists to supply flower arrangements regularly.

18. Environmental Conservation

- Hotel staff is trained for eco-friendly practices.
- 100% organic cotton bed sheets used.
- Chemical free laundry cycles are encouraged.
- Using agents which are non-toxic, water based, hypoallergic and biodegradable.
- Cards are put in hotel rooms urging to save.

- Natural resources.
- Use of energy efficient light bulbs.

19. Food And Beverages Department

The food and beverages department is responsible for the sale of food and beverages. Various service departments involved in kitchen are banquets, restaurants room service, stewarding, bars and coffee shops.

- i. Kitchen - It is a place where food is prepared. In large hotels the kitchen may be divided into various sections for various aspects related to food preparation such as butchery, bakery and confectionery, vegetable preparations. soup section, pantry, hot range etc. In smaller hotels the kitchen would combine various sections.-
 - There could be various stall in the kitchen
 - The executive chef (Chef-de-cuisine) is the head of the kitchen and is responsible for planning, organising and controlling the kitchen operations.
 - Next in the hierarchy is the deputy chef
 - There are supervisors for some sections of the kitchen 'Chef-de-Parties'.
 - There are number of cooks who make the common food items.
 - Kitchen Stewarding is concerned with the storage maintenance, cleanliness and issue of cutlery, crockery and glassware to the restaurant and kitchen.
 - It is the responsibility of the department to maintain cleanliness in the kitchen and to wash the pots and pans used.
 - This department may have an executive kitchen steward, kitchen steward, dish washer, pot washer. and utility workers to clean the kitchen.
- ii. Restaurants
 - It is a commercial facility that provides food and beverages to the customers.

- It is equipped with dining tables, chairs and other required furniture with crockery, cutlery, linen and decor.
- iii. Staff Members of a Restaurant
 - A restaurant manager is responsible for overall restaurant functioning of the restaurant.
 - The Senior Restaurant Supervisor and head waiter lead a team of waiters / Stewards who actually serve the food.
 - Assistant waiter clears the table.

20. Support Service Department

A hotel has other departments which provide support and are involved in the overall management and efficient functioning of the hotel which are referred to as "back office" departments.

These are

- Finance and accounts Department
- Engineering Department
- Human Resource Department
- Sales and marketing department..

21. Management Functions

Key management functions are as below:

- i. Planning
- ii. Organising
- iii. Co-ordinating
- iv. Staffing
- v. Directing
- vi. Controlling
- vii. Evaluating

22. Scope

The organisational structure of a hotel is as follows:

- It has a hierarchy of top management, middle management, junior management, supervisors and operational staff.
- Youth is preferred for working in this industry as they can work for long hours.

- Youth is better informed and have better competency through advancement in education.
- They are open to new ideas and latest technology. They are ambitious and want to earn high monetary returns.
- The fundamentals of hospitality management is not only limited to hotels but are applicable to hostels and large hospitals also.

23. Essential Competences Required to Work in this Industry

- The person should be qualified in this field.
- The staff needs to be well groomed, have good hygiene, orderliness good manners and etiquettes besides smiling face.
- The front office staff should be cheerful, self-disciplined courteous physically fit, self confident and should have good communication skills
- The staff should wear clean and neatly ironed uniform, minimum accessories and well groomed hair.
- Nails should be clean and properly manicured.
- The front office staff must be seen at their best at all times as they not only present their good image but also of the establishment.
- There are various catering and hospitality management courses offered across the country these include certificate causes, diploma and degree courses.

24. Career Opportunities

- Position in housekeeping departments at various hierarchical levels.
- Entrepreneurial opportunities in housekeeping.
- Positions in front office and reception / control desk in hotels.
- Entrepreneurial opportunities for supply of flower arrangements.
- As a interior decorator
- Specialised in theme based events within the organisation.

OBJECTIVE QUESTIONS (1 MARK)

(A) Multiple Choice Questions

1. Which of the following option does not fall under hospitality services?

- a. Hotel b. Lodge
- c. Resort d. Janta flats

Ans. d) Janta Flats

2. Who cleans the room in a hotel ?

- a. Bell boy b. Floor Supervisor
- c. Room attendant d. Restaurant Manager

Ans. c) Room Attendant

3. Which of the following department is not a part of support services department

- a. Front office. b. Finance & accounts
- c. Human Resource department
- d. Sales and marketing department

Ans. a) Front office.

4. For which of the following a decorated camp is set up?

- a. River rafting b. Tracking
- c. Wedding d. Both a) and b)

Ans. d) Both a) and b)

5. Which of the following does not come under hospitality industry?

- a. Tourism b. Meetings
- c. Accomodation d. Wedding

Ans. d) Wedding

(B) Match the following

- | | |
|--------------------------|---------------------------|
| A) Assistant Housekeeper | i) Flower decoration |
| B) Gardener | ii) Clearing of bathrooms |
| C) Room attendant | iii) Duty schedule |
| D) Floor supervisor | iv) Cleanliness of lobby |

Pick the right option

- a. A - iii), B - i) C - ii) D - iv)
- b. A - i), B - ii) C - iii) D - iv)
- c. A - ii), B - iii) C - iv) D - i)
- d. A - iv), B - i) C - ii)- D - iii)

Ans. a) A - iii), B - i) c - ii) D - iv)

(C) Fill in the Blanks

- 1. The hospitality industry has grown to provide _____.
- 2. _____ is the relationship between the guest and the host.
- 3. _____ deposits misplaced luggage of guest.
- 4. The fundamentals of hospitality management are applicable to _____ and large hospitals.
- 5. _____ is a commercial facility that provides food and beverage to be customers.

Ans. 1) A home away from home" 2) Hospitality 3) Lost and found section 4) Hostel 5) Restaurants.

(D) Picture Based Questions

- 1. Identify the pictures and name it.



Ans. Resort.

Very Short Answer Question (1 Mark)

1. In Indian culture guests are regarded a 'God-like', write the words which imply this treatment?

Ans. In Indian culture guests are regarded as God likes and treated accordingly as implied in the words "Atithi Devo Bhava."

2. How does a resort attract the tourists?

Ans. A resort is known for its leisure attraction.

- It offers a broad range of amenities & sports activities.
- It gives total vacation experience.

3. Which activities are included in pre-arrival stage of a 'Guest cycle'?

Ans. The activities done in the pre-arrival stage include:

- i. quoting rates to the guests.
- ii. reserving a room as a part of central reservation system.

4. What is the duty of a bell-boy in a hotel?

Ans. A bell boy is responsible for shifting of baggage of guests, within and out of the room.

Case Study Based Multiple Choice Questions (1 Mark × 4)

Cleaning is an integral part of any organisation / office / hotel, hence it involves planning and having a well organised approach in selecting staff with practical housekeeping operational skills with correct cleaning procedures and skill to do the task well under a qualified supervisor to ensure quality services.

1. Which of the following hospitality service offers rented accommodation especially for sleeping and may not offer food and other services?

- | | |
|----------|----------|
| a. Hotel | b. Lodge |
| c. Motel | d. Camp |

Ans. b) Lodge

2. Which of the following is not included in stages of a Guest Cycle?

- | | |
|----------------|--------------|
| a. Arrival | b. Departure |
| c. Pre-arrival | d. Tourism |

Ans. d) Tourism

3. What are the reasons of travelling nowadays?

- a. Business b. For buying vegetables
- c. Health Care d. Both a) and c)

Ans. Both a) and c)

4. Which of the following statement is incorrect?

- a. A hotel is a commercial establishment offering lodging, meals and other services to its guests.
- b. 'Smile' is the most enduring competency required at front office personnel
- c. Hospitality industry works on the idea of 'A Home Away from Work Home' nowadays.
- d. Kitchen Steward's work is related to cooking of food.

Ans. d) Kitchen Steward's work is related to cooking of food.

Short Answer Questions (2 Marks)

2. What are the responsibilities of a Front Office Supervisor?

Ans. The responsibilities of a front office Supervisor are as follows.

- i. Meets and greets all arrivals.
- ii. Is responsible for a shift.
- iii. Ensures accurate and speedy rooming procedure.
- iv. Checks occupancy.

2. How is environmental conservation being encouraged in the hospitality industry?

Ans. i. Hotel staff is trained for eco-friendly practices.

- ii. 100% organic cotton bed sheets are used.
- iii. Chemical free laundry cycles are encouraged.
- iv. Use of energy efficient light bulbs.

3. Write four stage of Guest-Cycle?

Ans. i. Pre-arrival

- ii. Arrival

- iii. Occupancy
 - iv. Departure
4. Which departments come under Support Service department.

Ans. Following departments come under Support Service department.

- i. Finance and account's department.
- ii. Engineering department.
- iii. Human resource department.
- iv. Sales and marketing department.

Short Answer Questions (3 Marks)

1. Hospitality Industry has grown to provide. 'A Home Away from Home.' Why is this industry one of the fastest growing Industry?

Ans. This industry is growing fast due to the following reasons.

- i. People travel for pilgrimage and to visit holy places.
- ii. People Travel to different countries for business purposes.
- iii. Medical tourism is also an upcoming field as people travel to seek health care.
- iv. Students also travel to different countries for studying.
- v. Some people travel to visit heritage monuments and wild life.
- vi. People also travel to various places for experiencing different cultures.

For all the above reasons people need comforts and facilities similar to what they get at home.

2. The front office staff coordinates with various department for providing services to guests. Name these departments.

Ans. i. Transport department.

- ii. Accounts and billing department.
- iii. Restaurant.
- iv. Engineering department.
- v. Stores.
- vi. Housekeeping department.

3. List the main functions of Housekeeping department?

- Ans.** i. Cleaning of public areas and guestrooms
- ii. Supply, upkeep of laundry.
 - iii. Exchange of various linen and uniforms.
 - iv. Internal flower arrangement and maintenance of external landscape or garden.
 - v. Coordination and communication with other departments such as front office restaurants, engineering, accounts etc, through control desk.
 - vi. Pest-control.

Long Answer Questions (4 Marks)

1. Explain the meaning and functioning of kitchen in a hotel?

Ans. Kitchens - It is a place where food is prepared. In large hotels the kitchen may be divided into various sections and has many workers.

Functioning of a kitchen -

- i. The executive chef (Chef-de-cuisine) is the head of the kitchen responsible for planning, organising, and controlling the kitchen operations.
 - ii. The next is deputy chef.
 - iii. There are supervisors for some sections of the kitchen called 'Chef-de-parties'.
 - iv. Then there are number of cooks who make the food items
 - v. Kitchen Stewarding is concerned with the storage, maintenance, cleanliness and issue of cutlery, crockery and glass ware.
 - vi. This department may have an executive kitchen steward, kitchen steward, dishwasher, pot washer and utility workers to clean the kitchen.
2. Write about any four establishments which provide hospitality services.

Ans. Refer to Points to Remember Number-4

Long Answer question (5 marks)

1. What are the essential competencies required to work in hospitality industry?

Ans. The person should be qualified in this field- Refer to Points to Remember Number-23

2. What are the career opportunities available in the field of Hospitality industry?

Ans. i. Position in housekeeping departments at various hierarchical levels.
ii. Entrepreneurial opportunities in house keeping.
iii. Positions in front office and reception / control desk.
iv. Entrepreneurial opportunities for supply of flower arrangements.
v. As a interior decorator.

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple Choice Questions

1. Which of the following department is the focal point of any hotel ?
 - a. Finance and accounts department.
 - b. Front office.
 - c. Human Resource department.
 - d. Sales & marketing department.
2. Which of the following is not a part of kitchen crew?
 - a. Executive chef.
 - b. Chef-de-parties.
 - c. Gardener.
 - d. Kitchen steward.
3. Which of the following is not a department of hospitality management ?
 - a. Garden
 - b. Management
 - c. House keeping
 - d. Support service.

4. Which of the following cleaning agents are used to clean various surfaces?

- | | |
|------------|-------------------|
| a. Ammonia | b. Oil |
| c. Polish | d. Both 'a' & 'c' |

(B) Match the Following

- | | |
|----------------|------------------------------------|
| A. Guest Cycle | i) Finance and Accounts department |
| B. Camp | ii) Deputy Chef |
| C. Back office | iii) Arrival |
| D. Kitchen | iv) Rafting |

Pick the Correct Option.

- | | |
|--------------------------------|--------------------------------|
| a. A iii), B iv), C (i), D ii) | b. A i), B ii), C iii), D. iv) |
| c. A ii) B iii), C iv), D i) | d. A iii), B iv), C i) D ii) |

(C) Fill in the Blanks

- _____ organizes supervise and controls all uniformed services.
- At the time of departure the guest is ready to leave / more out or _____ of the accommodation.
- _____ is the focal point of a hotel.
- _____ welcomes guests upon arrival and escorts them to the registration desk.
- In order to run the housekeeping department efficiently it is essential to select appropriate _____ to match various posts within.

(D) Picture Based Questions

Identify the following picture and name it.



Very Short Answer Question (1 Mark)

1. What is the main function of guest room brigade?
2. What is a 'back office' in a hotel ?
3. Who is a 'chef-de-party'?
4. Who is a tourist?

Case Study Based Multiple Choice Questions (1 Marks × 3)

The guest cycle falls largely under the domain of Front office. The guest arrives at the front office and comes in contact with the staff of the hospitality industry for the first time. Interaction between the guest and the staff is very critical to develop good relationship between the guest and the organisation and also in building a good image. Hence, the front office is the focal point of any hotel.

1. The front office staff coordinates with which of the following departments for providing services to guests ?
 - a. Transport department
 - b. Accounts department
 - c. Gardener
 - d. both a' and 'b'
2. Which of the following is not a function of a receptionist?
 - a. Organising all uniformed services.
 - b. Reserving room for a guest.
 - c. Registering the name.
 - d. Providing information.

OR

_____ is responsible for shifting the baggage of guest within and out of the room.

3. _____ are used to enhance the aesthetic appeal of various interior spaces.
 - a. Flowers
 - b. Bulb
 - c. Mirror
 - d. Door

OR

_____ lead a team of waiters and stewards

- a. Senior Restaurant supervisor.
- b. Cook
- c. Manager
- d. Gardener

Short Answer Questions (2 Marks)

1. What are the main duties of a receptionist in a hotel ?
2. Which are the main departments / sectors in hospitality. industry?
3. What is the meaning of the word hospitality ?
4. Explain 'occupancy stage' of a guest cycle.

Short Answer Questions (3 Marks)

- 1 Draw a general organisational Chart of a Housekeeping department?
- 2 House keeping department is divided into various sections. Name them.
- 3 List the main duties of a front office Manager.

Long Answer Questions (4 Marks)

1. What are the main stages of a 'Guest Cycle'? What are various activities carried out in each stage?
2. How is Front Office Department organised? Write the major functions of each of them?

Long Answer Questions (5 Marks)

1. Write the responsibilities of various members of the housekeeping department of a hotel?
2. Explain the meaning of a 'Restaurant' and functioning of a restaurant.

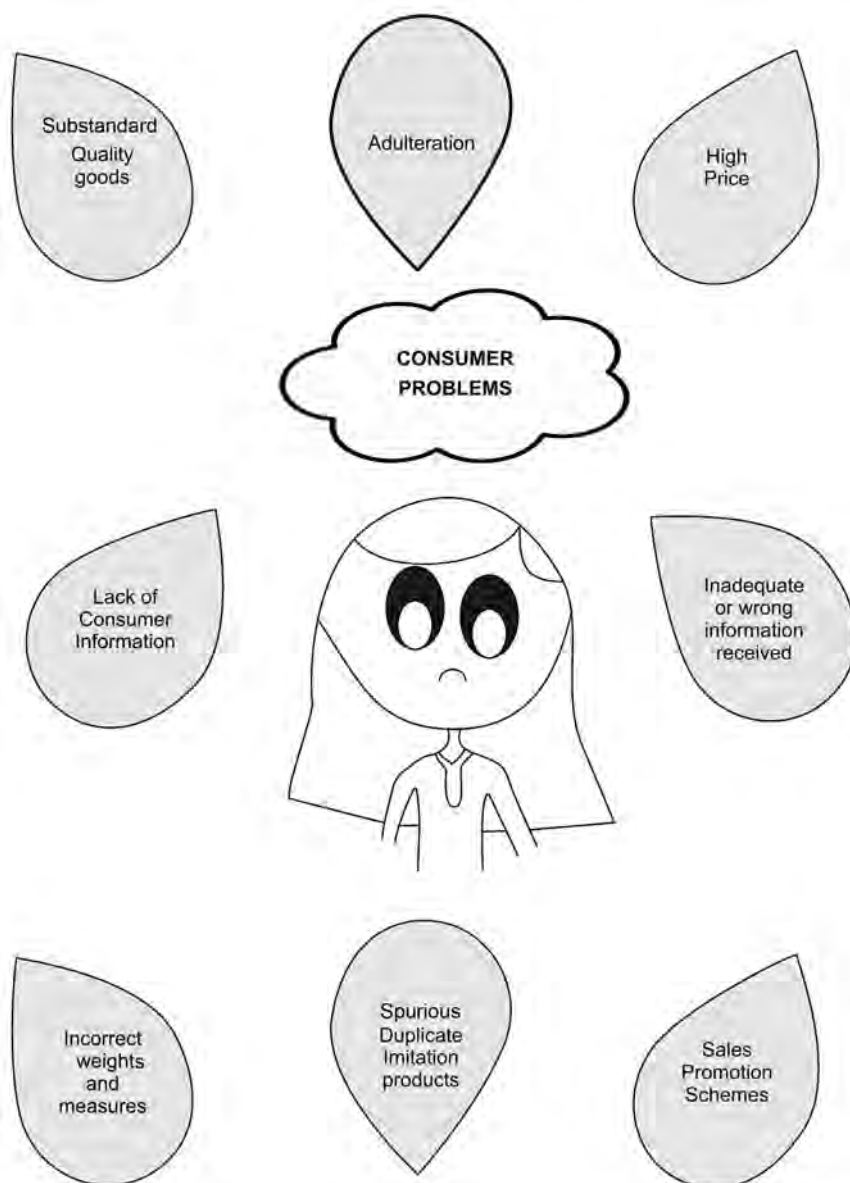
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16. CONSUMER EDUCATION AND PROTECTION

‘POINTS TO REMEMBER’

1. **Consumer is a person who buys goods and services for the satisfaction of their personal needs. Consumers are the primary component of a socio-economic system.**
2. **Consumer product means any article, produced or distributed for sale to a consumer for personal or family use in one's home or in an institution e.g. school, hospital, college, office etc. or for business purposes.**
3. **Consumer behaviour is a process through which the buyer makes decisions about purchasing.**
4. **Consumer forum is a place/ organisation where consumers can discuss consumer products/ services and their advantages and disadvantages.**
5. **Consumer footfalls mean the number of customers/ consumers who visit any given space such as a store or a mall.**
6. **Consumers have following expectations while purchasing goods -**
 - i. They should get goods at reasonable price.
 - ii. To get appropriate /adequate information about goods.
 - iii. They should get genuine goods and services
 - iv. They should get good quality products.
 - v. They should get every product pure.
 - vi. They should get all goods in correct weights and measures.
 - vii. Shopkeeper should show ethics in sales and promotion of goods.

7. Consumer Problems -



- i. Substandard poor quality goods - Many manufacturers produce poor quality goods and sell them. Many times the label on goods is a copy of good quality products. When this happens, consumer gets confused and buys those products.

- ii. Adulteration - Adulteration means when some inferior quality product is added or some good content is removed from any substance. Adulteration is done intentionally to make profit, but sometimes it can be done unintentionally. Adulterants can cause harm to health, like metanil yellow in turmeric powder, iron fillings in tea leaves.
- iii. High prices- Many times the price of same product is different in different shops. It can be due to many reasons like big shops have extra expenditures, place of purchase, demand of goods, delivery system, quality of goods. Consumer should not think that expensive goods only are of good quality, he should do proper market survey and compare prices, then buy goods.
- iv. Lack of consumer information - Most of the consumers are not aware of their rights and responsibilities, that's why he faces so many problems.
- v. Inadequate or wrong information received - There are many sources to provide information about any product, still the consumer does not get complete correct information.
 - a. Most of the labels on products are incomplete, they do not give complete information. Few labels are imitations of big companies, hence they cheat the consumers.
 - b. The second source to get information about a product by the consumer are advertisements, but most of the advertisements do not give complete information. Some advertisements are misleading also, they exaggerate the quality of a product like advertisements of cream, shampoo etc.
 - c. There is non availability of buying goods for judging the quality of a product, hence consumer cannot select appropriate goods.
 - d. Sometimes consumers are cheated by inappropriate packaging. During festivals, mostly goods with attractive packaging are seen in the market. Many times the outer packaging is very attractive but the inner goods are inferior. Many times consumer gets lured by the attractive big packaging and buys the goods, but finds very less quantity of product inside it.

- vi. Incorrect weights and measures - Many shopkeepers cheat the consumers by using incorrect weights and measures like –
 - a. Not using standardized weights.
 - b. Weights are made hollow from below.
 - c. Weighing with stones, instead of weights.
 - d. Putting magnet on the weighing scale.
 - e. Instrument used for measuring liquids is raised from the bottom.
 - f. Stretching elastic, ribbon etc. while measuring.
 - g. Not using metre rod, putting markings on the table and then measuring cloth.
- vii. Spurious/Duplicate/Imitation products - Some well known brands are copied and duplicate products are sold in the market. Many times their label is also copied of genuine product. It's name and packaging is like original product so consumer gets confused and buys that product.
- viii. Sales promotion schemes - Nowadays market is flooded with products so the companies are competing with each other. They come out with many sales promotion schemes like lucky draw, free gifts, new goods in exchange of old ones etc. so that consumers buy their products. Many times consumer gets swayed by these and gets cheated.

8. Consumer Education and Protection are tools which empower and equip consumers to protect themselves from adverse market forces. They help the consumers understand legislation and policy matters which would directly have a bearing choices as consumers.

9. Importance of consumer education and Protection - We are living in a "Global village and facing the challenges of global markets. The march towards 'global economy' necessitates a global outlook on the part of consumers who cannot sit back and watch. They have to emerge as a progressive force to ensure their welfare. If he is educated, careful and alert, he will find out solutions to his problems and will not be deceived. Today we can see a variety of

products in the market. One has to understand the new technology and new products, and select right products. Hence consumer education and protection is very important.

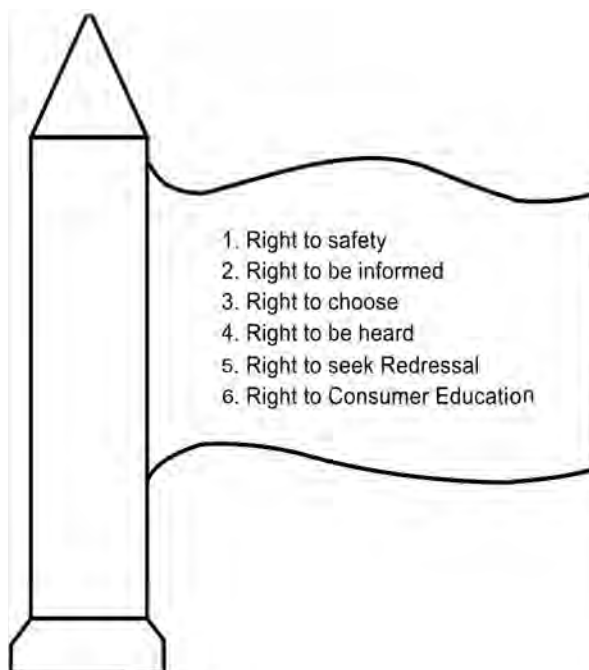
10. Consumer Protection Act (CPA) was passed in 1986. It was modified many times. New Consumer Protection Act was implemented in 2019.

Consumer Protection Act has two implications -

- i. It gives the consumer the right to complain to an authority about his/her grievances and seek speedy redressal.
- ii. Consumer can claim compensation for any loss or injury suffered on account of the negligence of the manufacturer. It applies to all goods and services unless otherwise expressly notified by the central government.

11. Under Consumer Protection Act 1986, six consumer rights have been given. Consumer rights are those rights, which are or should be provided legally to protect consumer interests. These are rights designed to ensure that all consumers obtain goods and services of reasonable quality, at fair prices.

12. Consumer Rights



Six Consumer Rights:-

- i. Right to safety - This refers to the right to be protected against hazardous effect that may be caused to the health / life of a consumer. This right specifies that the consumer has the right to be protected against products, production processes and services which are hazardous to health or life.
- ii. Right to be informed - This means the right to be informed about the quality, quantity, potency, purity, standard and price of goods and services so that the consumer can protect himself against unfair trade practices.
- iii. Right to choose - This means that every buyer should have access to products of varying quality and quantities, prices, size and design. Consumer can choose according to his needs and wants.
- iv. Right to be heard- It means that consumers' interest will receive due consideration at appropriate forums. It also includes the right to be represented in various forums that are working to ensure consumer welfare.
- v. Right to seek redressal - It means that every consumer has the right to seek redressal against unfair trade practices. If someone exploits the consumer, provides defective goods and services, then consumer can complain against him and demand compensation.
- vi. Right to Consumer Education - It means that each consumer has right to education so that he can save himself against exploitation and solve his problems. He has the right to acquire knowledge and skill to be an informed consumer, so that he will be able to make wise decisions while purchasing goods and hiring services.

13. Consumer Responsibilities -

- i. Consumer should regularly update his knowledge of various laws made by the government.
- ii. He should be honest in all his dealings of all products (goods / services).

- iii. Before making a purchase, consumer should do a market survey so that he can compare the prices and make a wise choice.
- iv. Consumer should feel free to choose from various options available, as per his needs and do not get persuaded by someone.
- v. Before purchasing, he should read all the information given on the label / brochure.
- vi. He should purchase only goods with standardization marks, which are of good quality.
- vii. While buying any product, take proper bill. Keep this bill and other important documents safely.
- viii. In case of purchasing services like insurance, credit card, bank deposits etc., he should read and understand all terms and conditions.
- ix. Many national and international consumer organisations are working for the benefit of consumers. He should understand their work and activities. It would be beneficial to become member of any such organisation.

14. Different Standardization Marks -





ECOMARK

Standardization marks are those marks which are given by the government on good quality products and they are main requisite for attaining quality of that product.

- i. ISI mark - This is a certification mark of BIS (Bureau of Indian standards). BIS was earlier called ISI (Indian Standards Institution). This standard mark is found on many food products like Packaged drinking water, processed foods, candy toffee, infant milk powders. It is also found on other products like electrical appliances, pressure cooker, soap, detergent, paints, paper, cement, iron rods etc.
- ii. Agmark - This mark is given by Directorate of Marketing and Inspection. It is given on agricultural products like spices, ghee, butter, oil, wheat flour, besan etc.
- iii. FSSAI - FSSAI means Food Safety and Standard Authority of India, it is a standard mark given by Ministry of Health and Family Welfare. It is compulsory for all food products like biscuits, tea leaves, coffee, cold drinks etc.
- iv. Woolmark - It is a found on wool and woollen clothes. It is a standardization mark of quality of the International Wool Secretariat for wool.

- v. Silkmark - It is a found on pure silk garments, given by Silkmark Organisation of India (SMOI). Silkmark ensures 100% natural silk.
- vi. Hallmark - It is given by Bureau of Indian Standards (BIS), found on pure gold, silver and platinum jewellery.
- vii. Ecomark scheme- This mark is given by Bureau of Indian standards (BIS). It is given to products which do not cause pollution like soap, detergent, paint, paper, cosmetics.

STANDARDIZATION MARKS

Standard Mark	Full Name	Agency which gives it	Items having this mark
ISI Mark	—	Bureau of Indian Standards (BIS)	<u>Mandatory Certification</u> -Mineral water, Packaged drinking water, condensed milk, milk powder etc. <u>Voluntary Certification</u> Biscuit, coffee etc.
AGMARK	Agricultural Marketing	Directorate of Marketing and Inspection	Agriculture Products (raw and processed)
FSSAI	Food Safety and Standards Authority of India	Ministry of Health and Family Welfare	All food products
Woolmark	—	International Wool Secretariat	Pure wool, woollen clothes, sweater, blanket.

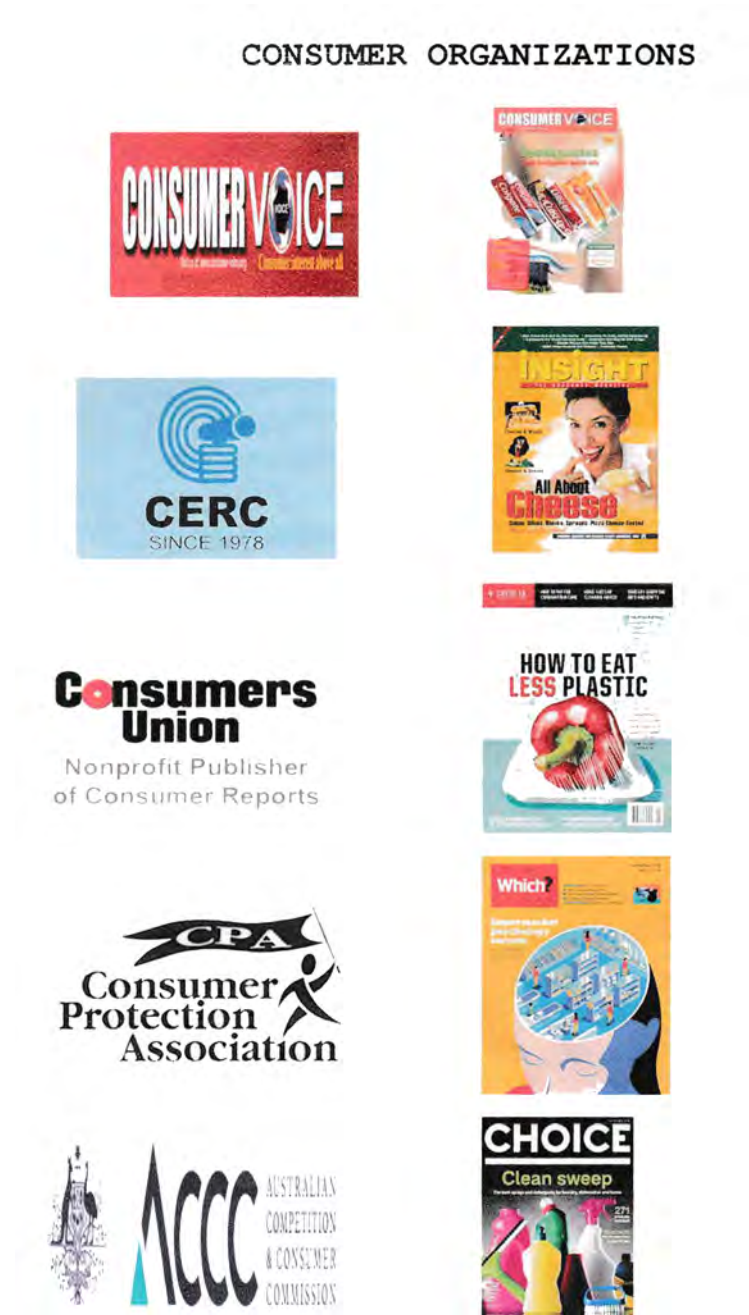
Silkmark	—	Silkmark Organisation of India (SMOI)	Pure silk products
Hallmark	—	Bureau of Indian Standards (BIS)	Gold, Silver and Platinum Jewellery
Ecomark Scheme	—	Bureau of Indian Standards (BIS)	Soap, Detergent, Cosmetics, packing materials

15. Apart from statutory, semi government and non government bodies looking after consumer interests like Bureau of Indian Standards (BIS) and Directorate of Marketing and Inspection (DMI), Government of India, there are Protection Councils set up by the government at central and state levels.

16. Work done by Consumer Organisations–

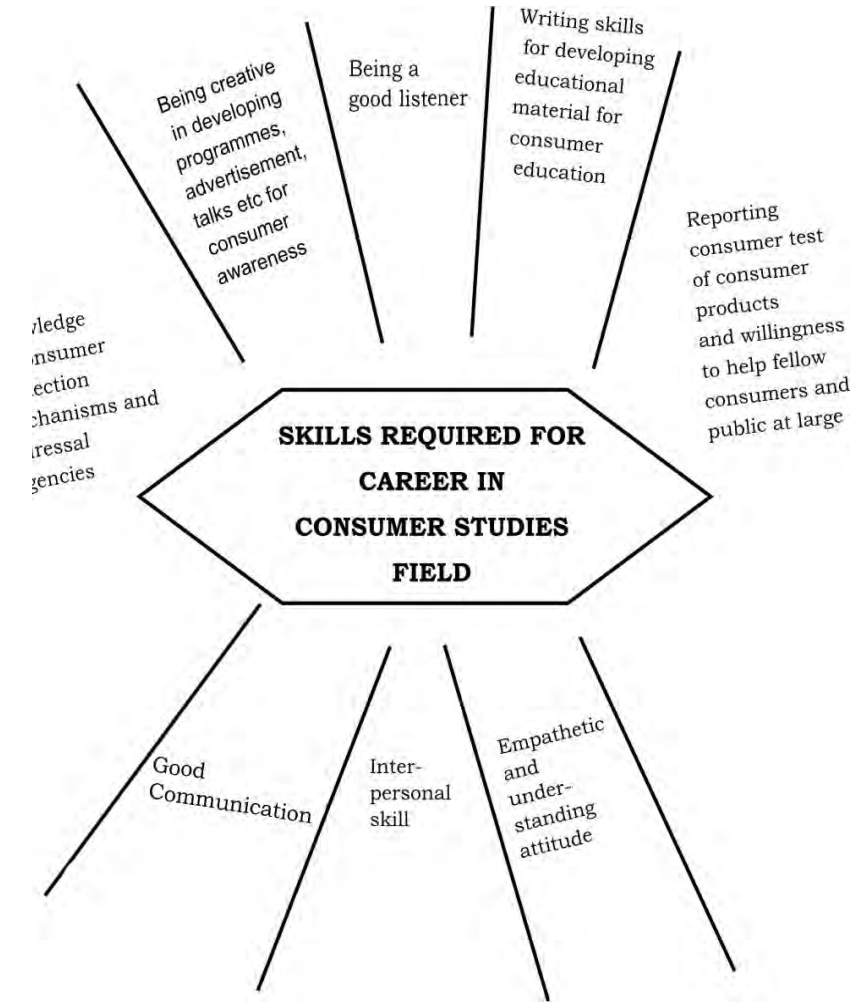
- i. Educate and protect the consumers
- ii. Comparative testing of products
- iii. Creating consumer awareness about harmful and unsafe products
- iv. Disseminating information about new legislative provisions for consumers
- v. Give legal advice and advocacy.
- vi. Handling consumer complaints
- vii. Acting as vigilance groups
- viii. Hold public meetings, bring out publications, important role in consumer awareness, empowerment and consumer movement.

17. Few Consumer Organisations-



Country	Consumer Organisation	Publication
1 India	Voice, Delhi	Consumer Voice
2. India	CERC, Ahmedabad	Insight
3. America (US)	Consumer's Union	Consumer Reports
4. England (UK)	Consumer Association	Which
5 Australia	Australian Consumer Association	Choice

18. Skills required for career in Consumer Studies



19. Educational courses in the field of Consumer Education and Protection -

- i. B.Sc. Home Science
- ii. B.Sc. Family Resource Management
- iii. B.Sc. Home Management
- iv. B.B.A. (Bachelor of Business Administration)
- v. B.B.S (Bachelor of Business Studies)

In different institutions, the subject may be called Consumer studies, Consumer Education, Consumer Behaviour, Consumer in the market.

20. Career / Scope in the Area of Consumer Education and Protection -

- i. Work in government organisations like Bureau of Indian Standards, Directorate of Marketing and Inspection, Ministry of Consumer Affairs in various decision making managerial and technical positions.
- ii. Work in voluntary consumer organisations for product testing, consumer education or empowerment, publication of their magazine.
- iii. Work in Consumer division of corporate houses.
- iv. Work with market research organisations.
- v. Start your own consumer organisation.
- vi. Work in National Consumer Helpline for doing consumer counselling, helping people in getting redressal of their complaints.
- vii. Work as consultants to Consumer clubs being run by schools and colleges.
- viii. Work as a freelance consultant for redressal guidance through Consumer courts.
- ix. Work with the Department of Audio-visual publicity as Content developer.
- x. Work as analyst in consumer testing laboratories for comparative evaluation of products
- xi. Become Consumer activist.
- xii. Journalism related to consumer affairs.

Full forms of Abbreviations

1	CPA	Consumer Protection Act
2	BIS	Bureau of Indian Standards
3	ISI	Indian Standards Institute
4	FSSAI	Food Safety and Standards Authority of India
5	AGMARK	Agricultural Marketing
6	DMI	Directorate of Marketing and Inspection
7	SMOI	Silkmark Organisation of India
9	CERC	Consumer Education and Research Centre
9	VOICE	Voluntary organisation in interest of Consumer Education.
10	BBA	Bachelor of Business Administration
11	BBS	Bachelor of Business Studies

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple Choice Questions

1. What is the number of customers / consumers who visit any given space such as a store of a mall called ?
 - a. Consumer Association
 - b. Consumer Product
 - c. Consumer Footfalls
 - d. Consumer Behaviour

Ans. c) Consumer Footfalls

2. When was Consumer Protection Act approved ?
 - a. 1964
 - b. 1972
 - c. 1982
 - d. 1986

Ans. d) 1986

3. Which of the following standardization mark is found on water bottle ?
 - a. Agmark
 - b. ISI
 - c. Silkmark
 - d. FPO

Ans. b) ISI

4. On what products is Hallmark standardization mark found?

- a. Gold jewellery b. Silver Jewellery
- c. Brass utensils d. Both a) and b)

Ans. d) Both a) and b)

5. Which of the following career is not associated with Consumer Education and Protection ?

- a. Becoming Consumer activist
- b. Becoming Consultant in Consumer Club
- c. Becoming journalist d. Working in B.I.S.

Ans. c) Becoming journalist

(B) Match the following

- | | |
|---------------------|-------------------|
| A. Consumer Voice | i) America |
| B. Which | ii) India |
| C. Choice | iii) England (UK) |
| D. Consumer Reports | iv) Australia |

Pick the correct option-

- a) A - ii), B - iii), C - iv), D - i)
- b) A - i), B - ii), C - iii), D - iv)
- c) A - iv), B - iii), C - ii), D - i)
- d) A - iii), B - i), C - ii), D - iv)

Ans. a) A - ii), B - iii), C - iv), D - i)

(C) Fill in the Blanks

- 1. _____ are those places / organisations where consumers can discuss consumer products/ services and their advantages and disadvantages.
- 2. _____ means to add some inferior quality product in any product or to remove some good content.
- 3. Right to safety is ----- right of consumer.
- 4. _____ mark is found on electrical appliance
- 5. Full form of F.S.S.A.I. is _____ .

Ans. 1. Consumer forum

- | | |
|-----------------|---|
| 2. Adulteration | 3. basic |
| 4. ISI | 5. Food Safety and Standards Authority of India |

(D) Picture Based Questions

1. You want to buy a silk scarf. Which standardised mark you will see on it? Draw the picture.

Ans. Silkmark



Your Assurance of Pure Silk

2. Identify the given picture and tell that this standardization mark is given by which agency?



Ans. Agency - B.I.S. (Bureau of Indian Standards)

(E) Very short answer questions-

1. What do you mean by a consumer?

Ans. Consumer is a person who buys goods and services for the satisfaction of his/her personal needs. Consumers are the primary component of a socio-economic system.

2. In which two ways does a vegetable seller deceive his customers ?

Ans. (i) Weighs vegetables using stones instead of weights.

(ii) Puts magnet below the balance.

3. What do you mean by Right to choose, given to a consumer ?

Ans. Right to choose means that every buyer should have access to products of varying quality and quantities, prices, size and design. Consumer can choose according to his needs and wants.

4. You want to buy woollen sweater for yourself. Which standardization mark you will see on that sweater? This mark is given by which organization ?

Ans. We will see Woolmark standardization mark on sweater. This mark is given by Wool Secretariat.

(F) Case Study Based Multiple Choice Questions (1 Mark × 4)

All of us purchase a variety of goods and services to satisfy our needs and desires. Hence every human is a natural consumer. The number of products being manufactured and sold is steadily increasing in both urban and rural markets. Manufacturers are responsible for supplying good quality products and if there is a problem, consumers have the right to redressal. Manufacturers can no longer take consumers/customers for granted. With increasing number of consumers and volume of consumption of goods and services, manufacturers have begun to realise that it is important to respect and satisfy the consumer since the reputation of the company and its profits are determined by consumer opinion.

1. Which standardization mark is given by SMOI ?

- | | |
|-------------|-------------|
| a. Silkmark | b. Agmark |
| c. Woolmark | d. Hallmark |

Ans. a. Silkmark

2. Which of the following is not a consumer problem ?

- a. Getting adulterated goods
- b. Getting product at right price
- c. Getting incomplete information
- d. Duplicate / Imitation products

Ans. b. Getting product at right price

3. What is the full name of CPA ?
- a. Consumer Public Act b. Central Protection Association
 - c. Consumer Protection Act d. Central Population Association

Ans. c. Consumer Protection Act

4. Which of the following is incorrect statement?
- a. Consumer organisations give legal advice to the consumers.
 - b. Consumers have the right to seek redressal.
 - c. Consumer should have knowledge of institutions giving redressal.
 - d. It is not necessary to take the receipt of the purchased product, for seeking redressal

Ans. d. It is not necessary to take the receipt of the purchased product, for seeking redressal

(G) Short Answer Questions (2 Marks)

2. When your mother purchases any good from the market, what are her four expectations?

Ans. Her expectations are that-

- i. She should get goods at reasonable price.
- ii. She should get complete information about that good.
- iii. That good should be of good quality.
- iv. She should get all goods in correct weights and measures.

2. Write the implications of Consumer Protection Act.

Ans.

- i. It gives the consumer the right to complain to an authority about his / her grievances and seek speedy redressal.
- ii. Consumer can claim compensation for any loss or injury suffered on account of the negligence of the manufacturer. It applies to all goods and services unless otherwise expressly notified by the central government.

3. What is Ecomark? This is given by which agency?

Ans. Ecomark is given on products which do not cause pollution like

soap, detergent, paint, paper, cosmetics. Ecomark standardization mark is given by Bureau of Indian Standards (B.I.S.)

4. Name any three consumer organisations. Where are they operating? Name the magazine published by them.

Ans. Three Consumer Organisations are -

- i. VOICE, Delhi, India

Magazine-Consumer Voice

- ii. CERC, Ahmedabad, India

Magazine-Insight

- iii. Consumers Union, US

Magazine-Consumer Reports

5. Seema had purchased an electric iron last month, which has got spoilt now. In relation to this, write her three rights and three responsibilities.

Ans. Three rights -

- i. Right to safety
- ii. Right to be informed
- iii. Right to seek redressal

Three responsibilities -

- i. Should have read all information given on label / brochure before purchasing.
- ii. Should have purchased iron with standardized mark (I.S.I.)

6. Reena wants to make a career in Consumer studies. She should take which education for this? Suggest her four options.

Ans. i. B.Sc Home Science

- ii. B.Sc Family Resource Management

- iii. B.Sc. Home Management

- iv. B.B.A. (Bachelor of Business Administration)

(H) Short Answer Questions (3 Marks)

1. Give the importance of Consumer Education.

- Ans.** i. To educate the consumers to take judicious decisions regarding their purchases.
- ii. To assist them in selecting proper goods and taking right decision in purchasing goods.
- iii. To make consumer aware of his rights and responsibilities.
- iv. To help him be alert and well informed against malpractices and advertisements.
- v. To demand safe, reliable and good quality products at a reasonable price.
- vi. To take necessary action/file a complaint when face any problem.
- vii. While purchasing the iron, they should have taken proper bill and kept it safely.

(I) Long Answer Questions (4 Marks)

1. 'Consumer has to face many problems in the market Explain any four consumer Problems.

Ans. i) Refer to Point to Remember Number-7

2. According to Consumer Protection Act consumer has been given which all rights? Make their list. Explain any one right in details

Ans. Consumer Protection Act gives six rights to consumers. These are as follows -

- | | |
|---------------------------------|--------------------------|
| i. Right to safety | ii. Right to be informed |
| iii. Right to choose | iv. Right to be heard |
| v. Right to seek redressal | |
| vi. Right to Consumer Education | |

Right to Safety - This refers to the right to be protected against hazardous effect that may be caused to the health / life of a consumer. This right specifies that the consumer has the right to be protected against products, production processes and services which are hazardous to health or life.

3. Which standardization mark will be given to the following food products.

Milk powder, Packaged drinking water, wheat flour, biscuit.

Ans.

Food Product	Standard Mark	Full Name
Milk powder	I.S.I. Mark	—
Packaged drinking water	I.S.I. Mark	—
Wheat flour	Agmark	Agricultural Marketing
Biscuit	fssai	Food Safety and Standards Authority of India

NOTE- All food products have fssai standardization mark hence this is also correct option.

4. Make a list of works done by Consumer Organizations.

Ans. Refer to Points to Remember Number-16

Long Answer Questions (5 Marks)

1. What are the responsibilities of a good consumer.

Ans. Refer to Points to Remember Number-13

2. Dinesh wants to make a career in the field of Consumer studies Which skills he should have for this ? Also enumerate which type of knowledge he should have in this field?

Ans. i. Good Communication skills.

ii. Interpersonal skills.

iii. Empathetic and understanding attitude.

iv. Being a good listener.

v. Creative skill in developing programmes, advertisements, talks etc. for consumer awareness.

vi. Writing skills for developing educational material for consumer education.

vii. Willingness to help fellow consumers and public at large.

viii. Knowledge about consumer protection mechanisms and redressal agencies.

ix. Knowledge about quality standards of various kinds of products,

adulteration and detection of adulterants.

- x. Knowledge of consumer protection laws, consumer rights and responsibilities.
- 3. Raj has an interest in journalism related to consumer aspects, but is not aware of other career options related to consumer education and protection field. Help him by making a list of various career options available in this field.

Ans. Refer to Points to Remember Number-20

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple Choice Questions

1. ----- is a process through which the buyer makes decisions about purchasing.
 - a. Consumer association b. Consumer behaviour
 - c. Consumer product d. Consumer footfalls
2. Which of the following is a basic right of a consumer ?
 - a. Right to consumer education b. Right to safety
 - c. Right to seek redressal d. Both a) and b)
3. Which of the following standardization mark is found on a packet of biscuits?
 - a. Agmark b. F.P.O
 - c. fssai d. Woolmark
4. Which magazine is published by Ahmedabad based Consumer Organisation CERC?
 - a. Consumer Voice b. Consumer Reports
 - c. Choice d. Insight
5. Write the full form of SMOI.
 - a. Silmark Organisation of India
 - b. Silmark Association of India
 - c. Standardization Organisation of India
 - d. Standard Association of India

(B) Match the following

- | | |
|------------|---------------------------|
| A) I.S.I | i. Packaging material |
| B) Ecomark | ii. Agricultural products |
| C) Agmark | iii. Noodles packet |
| D) fssai | iv. Water bottle |

Pick the correct option -

- A - i), B - ii), C - iii), D - iv)
- A - iv), B - i), C - ii), D - iii)
- A - iii), B - ii), C - i), D - iv)
- A - ii), B - iii), C - iv), D - i)

(C) Fill in the Blanks

- New Consumer Protection Act came in the year -----
- Full name of Consumer organization C.E.R.C. is -----
- It is the consumer's responsibility that before buying any product, he should read its -----
- Lucky draw, free gift etc. are company's ----- schemes.
- is the standardization mark given by International Wool Secretariat.

(D) Picture Based Questions

- Gold jewellery has to be purchased for your sister's marriage. Which standardization mark should be on them? Draw the picture.
- Identify the given picture and tell it is which standardization mark?



(E) Very short Answer Questions

- Define consumer footfalls.

2. A sweet shopkeeper weighs sweets alongwith the box. What is your responsibility in this context?
3. Your mother ordered a sack of wheat flour from the market. Which standardization mark should be present on it ?
4. Which Act has been made for protection of consumers, due to which consumer can move to court?

Case Study Based Questions (1 Mark × 3)

Non-governmental organisations (NGOs)/voluntary consumer organisations play an important role in consumer education and protection due to their non- partisan interests. They also disseminate information through their magazines, booklets, newsletters, buying guides, audio visual material and research reports. Many consumer organisations are engaged in comparative testing of products, creating consumer awareness about harmful and unsafe products, product recalls, disseminating information about new legislative provisions for consumers, legal advice and advocacy, handling consumer complaints and acting as vigilance groups.

1. How many rights have been given to consumers by Consumer Protection Act ?
 a. 4 b. 5
 c. 6 d. 8
2. Many ----- exaggerate the quality of products.
 a. Advertisements b. Labels
 c. Leaflets d. Brochures
 OR

We are living in a ----- village and facing the challenges of global markets.

- a. Big b. Global
 c. Small d. Modern
3. Suresh wants to make his Career in Consumer education and protection. Which of the following option is not appropriate for him ?

- a. Working in a Consumer Organisation
- b. Becoming consumer journalist
- c. Working in a M.N.C.
- d. Working in Bureau of Indian Standards

OR

Those marks which ensure quality of a product are called -----

- a. Quality marks b. Purity marks
- c. Human marks d. Standardization marks

Short Answer Questions (2 Marks)

1. Write full name of Agmark. This standardization mark is given by which organisation ?
2. Why is the cost of same product different in different shops? Give any four reasons.
3. Educate your friend in which four ways does a grocery seller use defective weights and measures?
4. Gagan wants to open to his own consumer organisation. Which four knowledge are essential for it?

Short Answer Questions (3 Marks)

1. Name three standardization marks given by Bureau of Indian Standards. Give one example of each.
2. "VOICE" is a Delhi based consumer organization. What works are done by consumer organisations?
3. One big consumer problem is - Getting incomplete or wrong information. Discuss this consumer problem.

Long Answer Questions (4 Marks)

1. Explain four basic rights given to a consumer so that he does not get cheated.
2. What are the expectations of a consumer from the market, explain any four points.
3. Your father purchased an electric juicer for home which has stopped working soon. The shopkeeper is not listening to him. In this context, inform him his two rights and two responsibilities.

4. Mona wants to work for consumer benefit. Tell her eight options she has in this field.

Long Answer Questions-(5 Marks)

1. Neha wants to make a project on National and International consumer Organisations. Inform her names, place and magazines published by a few consumer organisations.
2. Give the information asked about the following Standardization mark in the form of a table:

Standardization mark	Agency which gives the mark	Two examples
i. I.S.I.		
ii. Silkmark		
iii. Woolmark		
iv. Ecomark		
v. FSSAI		

-----O-----O-----O-----

17. DEVELOPMENT COMMUNICATION AND JOURNALISM 'POINTS TO REMEMBER'



1. Importance of Development Communication and Journalism

- i. Effective communication is a two-way process. Communication also refers to the use of various forms of media such as print, radio, television, new media etc.
- ii. Communication is used as an empowerment tool to facilitate people's participation in various developmental activities.
- iii. Communication provides information about the available technologies, leading to the advancement of the society.
- iv. They sensitise students to the process of development and train them to write/or to speak about issues related to an equitable and fair society.
- v. Development communication connects government institutions, non-governmental institutions (NGO) and individuals.
- vi. Development communication and Journalism aims to enhance the knowledge of students, current and future journalists, campaigners, and media professionals on development issues and strengthen practical skills.

2. Development

- i. Development is an indicator of change. This change is to improve the situation.
- ii. Development means a permanent positive change / or to bring improvement in the socio- economic and cultural life of most

individuals without exploitation or violence. Development in most parts of the world requires intensive efforts to address the problems of widespread illiteracy, population, malnutrition, poor health and pollution etc.

3. Development Journalism

- i. Development journalism is a social activity.
- ii. The journalist conveys the sentiments of the community to the community through several means. The importance of journalism is that the people have the right to express their views. Journalism is an indivisible part of any democratic system.
- iii. Development journalism focuses on the success of individuals who have adopted new technologies, tested new methods, and helped the society.
- iv. Development journalism promotes human development. Focuses on empowering people to help meet their basic needs, articulate their concerns, and manage their development and improve poverty and inequality.

4. Development Communication

- i. It facilitates socio-economic development and peace and happiness of individuals and the public community.
- ii. The objective is to inform and educate the community. It is about using communication to change or improve the way a citizen of a country is living. It uses a variety of messages to improve people's socio-economic status or their quality of life.
- iii. For greater impact, it connects suitable mass communication tools and interpersonal communication channels. It is based on the characteristics of the audience and their surroundings.
- iv. The term 'Development Communication' was first used in 1972 by renowned social scientist and communication expert Nora C. Quebral. She is known as "mother of Development Communication". According to Quebral, it is the 'art and science of human communication' used for facilitating development of

v. Development communication is a means of development and is very essential for a developing nation like ours.

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graph LR
    1["(1)  
Campaign"] --> 2["(2)  
Radio /  
Television"]
    2 --> 3["(3)  
Print  
Media"]
    3 --> 4["(4)  
Information  
Communication  
Technology"]
  
```

(1) Campaign

(2) Radio / Television

(3) Print Media

(4) Information Communication Technology



- i. Mixed use of various communication methods and materials such as meetings, excursions, newspaper articles, leaflets, and exhibitions on a subject for a pre-defined period.
- ii. It is a focused and well-organised activity, like 'election campaign'. During the election, every party or candidate explains about itself to people using various communication methods such as public meetings, print material, advertisements on radio and television, etc. The campaign starts before the election and ends on the date given by the Election Commission.
- iii. Similarly, print media, radio and television, drama, short film,

etc., are used to make the public aware of a subject or adopt appropriate practices for development communication.

- iv. Campaigns are sometimes time-bound schedules for a certain period. For example, a special Sunday in the month for polio immunization.

7. Red Ribbon Express-

- i. There was a countrywide campaign to create awareness about HIV/ AIDS.
- ii. A specially designed train traversed over 9,000 kilometers in a year.
- iii. It covered 180 districts/halt stations and held programmes and activities in 43,200 villages.
- iv. It comprised of seven coaches, equipped with educational material, primarily on HIV/AIDS,
- v. It also had interactive touch screens and 3-D models, services in the context of HIV-TB co-infection, an LCD projector and platform for folk performances, counselling cabins and two doctors' cabins for providing counselling and treatment.
- vi. the exhibition train provided information about the symptoms and prevention of the disease through Nukkad Natak/Folklore, Stories by artists and by Doctors through group counselling sessions, videos etc.
- vii. The project was implemented by National AIDS Control Organisation (NACO), Nehru Yuva Kendra Sangathan and international agencies like UNICEF and UNAIDS etc.



viii. Objectives of Red Ribbon Express-

- Dissemination of information about primary prevention services, creating awareness about AIDS.
- By creating an understanding of the disease, not treating AIDS as a stigma, reducing discrimination against the victims.
- To increase people's knowledge about prevention of diseases, health habits and lifestyles.

8. Radio and Television

- Radio and television are the most popular, cheapest, and convenient mass media, which can be used for the purpose of development.
- Radio remains the most accessible source of information, education, and entertainment for many people in our country.
- It is a mobile medium i.e., it can move with the listener at work or rest.
- Radio broadcasting is more beneficial than journalism i.e., print media, as it can be used for more and more persons, especially those of poor literacy levels. Because those who cannot read or write, the radio is suitable to inform them about what is happening around them.



9. Public Service Announcement

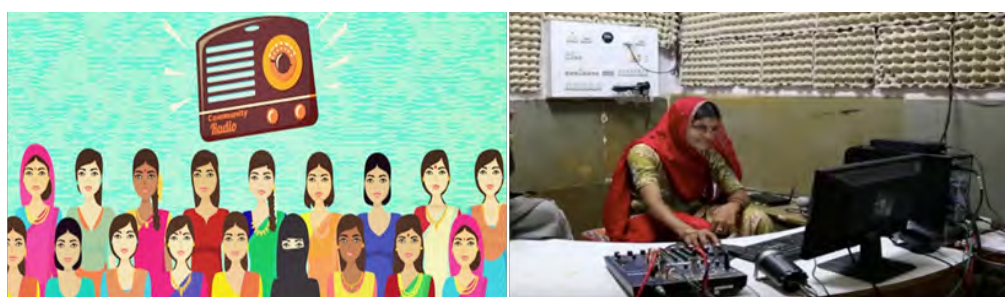
- There is usually a short message of 10-60 seconds in between the programme as a rhyme or jingles.
- Basically, these are advertisements of an idea or message for the betterment of the people, such as 'Follow the traffic rules', 'Say no to tobacco', 'One step towards cleanliness' and more.

- iii. In general, they are highly effective because of their catchy slogans and repetition of broadcasts.



10. Community Radio

- i. After the popularity of radio, All India Radio introduced a new format under which radio programmes were broadcast in a limited area where geographical and social status were same. This format is called local radio or community radio.
- ii. UNESCO defines community radio, that "Radio, by community, for the community and about the community." Community radio is not for profit.
- iii. It is brought or controlled by the local people.
- iv. The biggest advantage of community radio is that the contents broadcasted are for local use and in their local dialect, such as programmes related to community interest issues, poverty alleviation, gender inequality, health, sanitation, and so on.
- v. NGOs and educational institutions are licensed to set up a local community radio station to disseminate information and messages on developmental aspects.
- vi. It ensures public participation at all potential levels.
- vii. It also encourages youth to prepare for a career in Development Communication Journalism (DCJ).



Examples of Community Radio- Vanasthali Vidyapeeth (Rajasthan), Self-Employed Women's Association, SEWA (Gujarat), Delhi University FM , National Institute of Open Schooling ,NIOS. Radio Vahini / Mukta Vani etc. are some successful examples.

11. Television –

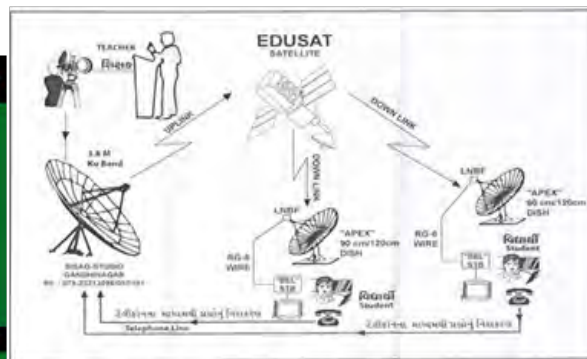
- i. The introduction of television in India under All India Radio began on September 15, 1959 as an experiment with equipment presented by West Germany.
- ii. Television as Doordarshan, which started as the branch of All India Radio, became a separate department in 1976.



- iii. New horizons of information and information are opened for television viewers. Can also be used to create awareness about various topics, such as environmental pollution and global warming.
- iv. It telecasts various programmes through multiple channels/ local levels. Some of these programmes give individuals an opportunity to participate in the form of talk shows, reality shows and competitions etc.
- v. Many government and non-governmental institutions are showing programmes of educational importance and public interest on various channels.
- vi. Television is currently the most prominent means of development communication which is providing entertainment and is also educational and enlightening.

12. Edusat-

- i. In September 2004, India launched the education satellite EDUSAT developed by Indian Space Research Organisation (ISRO).
- ii. It was the first Indian satellite to be specially built to serve the educational sector. It is also known as GSAT-3.
- iii. The main objective was to meet the demand for interactive satellite-based distance learning system for the country.
- iv. It strongly demonstrates India's commitment to use space technology for national development. It was used as an alternative medium for the development and dissemination of education, especially of population in far flung and rural places.



13. Print Media-

- i. There are many daily newspapers at the national and regional level all over the country, but there are very few regional newspapers which write and print about the problems related to rural areas and agriculture. Nevertheless, it is a medium of continuing education.
- ii. The contribution of the print media in providing information and transfer of knowledge is noteworthy. Even after the advent of electronic media, print media has not lost its charm or relevance.
- iii. Printing mediums make a long and profound impact on the mind of the reader.
- iv. Journalists in the printing medium collect news of various events and send them to the editors of various daily times. Their working day may involve interview with individuals to prepare stories or news stories, attend a press conference or contact through telephone and send e-mails etc.



- v. The power of Print media
 - The Print media educates the public.
 - The Print media helps democracy function effectively, giving the public information about government policies and programmes.
 - This helps people to voice their feelings and help the government make the necessary changes to those policies or programmes.

- The number of development communication journalism professionals who write with zeal and sensitivity for the rural poor are still low. Despite the neglect of the rural areas, the power of the pen or the power of the press cannot be denied.

14. Development Journalism Experiment: "Our Village Chattera"

- The Chattera Village Project commenced in 1969.
- In this project, the editor of Hindustan Times focused on Chattera, a small village in North West Delhi.
- Enterprising reporters of the Hindustan Times newspaper began to print a fortnightly column regularly describing the lives of the people of the village Chattera.
- A team of reporters understood the situation in the village sensitively and began to give detailed stories about it.
- This drew the attention of government departments and other institutions to the village and then many problems in the village gets solved.
- Village Jat Chaupal formed



Project "Our Village Chattera" - Hindustan Times

- Schools, bridges, and roads constructed.
- Bank branch opened in village in 1970.
- New income-generation schemes created.

- x. Fertilizer companies helped in the village.
- xi. Health, electricity, and water problems solved.

15. Information Communication Technology

- i. Information and communication technology is an umbrella term that includes computer hardware and software (machine and process material), digital broadcast and telecommunication technologies such as radio, television, mobile phones, etc.
- ii. Information communication technology- ICTs have been used for informing and disseminating knowledge to people. With the effect of which many sectors like agriculture, health, education have seen a lot of change as compared to earlier.
- iii. Information communication technology -ICTs has proven to be economically, socially, and politically transformative.
- iv. Today the use of Information Communication Technology (ICT) has become an active tool of Development Communication. Example: Electronic governance(e-governance) is the distribution of public services and information at the doorstep of the people with the help of computer. E-governance can play a catalytic role for sustainable inclusive growth.
- v. A more direct way of using Information Communication Technology is to improve the lives of poor people by the setting up of telecentres. Launched in June 2000, 'e-Chaupal' is a major initiative among all internet-based interventions in rural India.



16. The Sustainable Access in Rural India (SARI)



SARI: Sustainable Access in Rural India

SARI is a project of

- MIT
- IIT Madras
- Harvard University
- iGyan Foundation
- n-Logue Communications Pvt. Ltd.

The Sustainable Access in Rural India (SARI) project in the state of Tamil Nadu: Some 80 tele-center kiosks were set up offering a range of services including basic computer education, e-mail, web browsing and various e-government services including the provision of certificates.

17. SEWA - Self-Employed Women's Association



- It is the empowerment of women at the grassroots level.
- In 1972, Ela Bhatt founded SEWA in Gujarat, as a trade union. It is now globally recognized and had 1.7 million women members in 2019, who proudly represent their rights.
- The objective of the Association is to provide full employment and self-sufficiency to women workers. To provide them with work and support in other related sectors such as income, food

and social security (health, childcare and shelter) activities.



- iv. They run programmes that enable women's capacity to grow for use in computers, radio, television, video, telephone, fax machines, mobile phones and satellite communications.
- v. Community Learning Centers (CLCs) have been set up in rural areas and emphasis has been given on training of information technology to enhance the capacity of members including areas such as electrical, mechanical and information technology engineering.



18. Knowledge and Skills for Career



i. Cognitive Skills

- Before writing or presenting effectively about a problem, it is necessary to understand the problem thoroughly and to present it in a constructive manner (which can attract the attention of others and influence them).

ii. Creative Skills

- There is also a need to have creative skills.
- A person working in a mass media house or advertising agency with the skills in media designing, production and operation of technical instrument handling along with cognitive and creative skills will have an advantage while undertaking assignments or jobs. He will always be in a position to benefit from others.

iii. Technical Skills-

- Development communication and journalism professionals need to learn the technical skills to operate equipment correctly to optimise their presentations.
- Those interested to work as a development filmmaker, need to know camera techniques and video production apart from content development and implementation.
- They should be aware of all laws and regulations so that they know what they can and cannot do.
- They need to learn about the computers used to operate the station, basic radio production skills using suitable software and how to write a creative brief that effectively communicates.

iv. Presentation Skills

- For a career in DCJ, a combination of journalistic and presentation skills is required.
- Interest in current affairs and local conditions, hands-on experience in radio, the ability to communicate and knowledge of music are useful.

v. Questioning ability

- The ability to question helps to know the subtle details of any problem. Passion for adventure and travel are added advantages.

vi. Ability to work with diverse groups.

- DCJ professionals need to be people centric to understand people's viewpoint on issues affecting their lives and find solutions which will work for them.
- It is important to know the principles of social work.
- Leadership skills and excellent intra-personal skills.
- Should be a good listener to write with sensitivity.

vii. Language and computer skills

- Command in any one language is important and includes speaking, writing, and reading with an ability to write technical reports and documents.

- Knowledge of the basic skills of the computer is desirable for success, which include various computer software and applications- such as Google Doc, Google Sheet Microsoft Office such as Word, Excel and Power Point etc.

19. Scope and Career opportunities in Development Communication



Full names of Abbreviations

1	DCJ	Development Communication Journalism
2	NGO	Non-Governmental Organisation
3	RRE	Red Ribbon Express
4	HIV	Human Immunodeficiency Virus

5	AIDS	Acquired Immune Deficiency Syndrome.
6	IEC	Information Education Communication
7	NACO	National AIDS Control Organisation
8	NYKS	Nehru Yuva Kendra Sangathan
9	UNICEF	United Nation International Children's Fund
10	UNAIDS	United Nation Programme on HIV / AIDS
11	AIR	All India Radio
12	PSA	Public Service Announcement
13	SEWA	Self-employed Women's Association
14	EDUSAT	Education Satellite
15	ICT	Information and Communication Technologies
16	SARI	The Sustainable Access in Rural India
17	CLC	Community Learning Centre

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice questions

- What services were provided in the Sustainable Access in Rural India (SARI) project?
 - Employment Services
 - Agricultural Services
 - e-government Services
 - Community Services
 Answer- c) e-government Services
- Who does the work of reaching out to the community through many means?
 - Accountant
 - Moneylender
 - Historian
 - Journalist
 Answer - d) Journalist
- Which of the following medium are examples of weekly newspapers, magazines, leaflets?
 - Literature
 - Print media
 - Training medium
 - Digital medium
 Answer- b) Print media
- Pulse polio immunization is an example of multimedia ----- .
 - Project
 - Campaign
 - Advertisement
 - Interactive format
 Answer- b) Campaign

(B) Match the following-

- | | |
|---------------------------------------|------------------------|
| 1 A. SEWA | i) Delhi University FM |
| B. Sustainable Access in Rural India. | ii) GSAT-3 |
| C. Community Radio | iii) Gujarat |
| D. EduSat | iv) Tamil Nadu |

Pick the correct option -

- a) A - iii), B - iv), C - i), D - ii) b) A - iv), B - i), C-iii), D - ii)
c) A - ii), B- iv), C-I), D - iii) d) A - iv), B - iii), C - ii), D - i)
Answer- a) A - iii), B - iv), C - i), D - ii)

(C) Fill in the blanks-

- The term _____ was first used by Nora C. Quebral in 1972.
Answer - Development Communication
- The journey of Red Ribbon Express started from_____.
Answer - Kanya Kumari
- _____ is a mobile medium and is the most well-known mass media.
Answer - Radio
- Public Service Announcement (PSA) is generally a short message of_____ in the middle of the programme as a rhymn/ jingle.
Answer - 10 - 60 seconds
- _____ is a valuable research tool for Development Journalists and it is impossible to work satisfactorily without the basic level of computer literacy.
Answer - Internet
- In _____ India launched its first education satellite EDUSAT.
Answer - September 2004

(D) Picture Based Questions -

- Identify the picture and name the method of development communication shown in this.



Answer - Red Ribbon Express -Exhibition Train / Communication Campaign about HIV/AIDS

- 2 Identify the picture and name two modes of development communication shown in it.



a)

b)

Answer- a) Print Media/Newspaper b) ICT/ computer/Internet

(E) Very Short answer question -

- 1 What services have been made easily accessible using mobile phones? Give two examples.

Answer- Banking and financial transactions, marketing and distribution, employment, social business, and public services
(Any other, any two)

- 2 What kind of institution or organization can a development communication expert choose for his career?

Answer: Government and Non-Governmental Institutions or Mass Communication Organizations
(Any other, any two)

- 3 What centers have been set up in rural areas by the Self-employed Women's Association (SEWA)?

Answer: Community Learning Centre (CLC)

- 4 What two developmental problems can be studied by students doing research in research institutions?

Answer- Study of gender and development problems such as environment, consumption, health, agriculture and livelihood problems. (Any other, any two)

Case Study Based Multiple Choice Questions (4 X 1 Mark)

Most of the University Departments offering a Post-Graduate or Under-Graduate program in Mass Communication and Journalism generally have Development Communication as one of their main subjects. Some Universities, Colleges and Media Institutions also offer specialization in Development Communication. Jamia Millia Islamia, New Delhi offers a unique one-year Post-Graduate Diploma Program in Development Communication which familiarizes the students about various concurrent development initiatives taking place at Global and Domestic level. The eligibility to take admission in these courses is generally a Bachelor's in any stream having some understanding of socio-economic issues. There should also be good knowledge of current happenings in development sector. The selection is based on written test followed by a personal interview.

- 1 Under what skills will the complete knowledge of the operation of applications like Microsoft Office, Power Point be achieved?
- a. Cognitive skills b. Computer skills
 - c. Creative skills d. Hardware skills

Answer - b. Computer Skills

- 2 Development communication professional working in advertising agency for a media, will always be in an advantageous position rather than others if he has -----.
- a. Skills to work with a diverse group b. Language skills
 - c. Creative skills d. Dance skills

Answer: .c. Creative skills

- 3 Which of the following medium is not as effective as a development communication tool?
- a. Community Radio b. Television
 - c. Discussion and debate d. Internet

Answer - c. Discussion and debate

- 4 Which of the following statements is incorrect?
- Development journalism is a social activity.
 - Development journalism focuses on making people more infirm to their basic needs.
 - Development journalism promotes human development.
 - Development communication facilitates social, economic development, peace and happiness of individuals and the common man.
- Answer- b) Development journalism focuses on making people more infirm to their basic needs.

Short Answer Questions (2 Marks)

- 1 How are communication and development interlinked?
- Answer– Different methods of communication make the population at large aware of various technological advancements and discoveries. Through various means of communication, people can communicate with various government agencies to express their grievances and concerns. Further, any development at any place, if the public or community is informed by the media, will similarly improve the condition of the society.
- (Any other, any four)
- 2 How is community radio different from All India Radio?
- Answer –
- Community Radio is a new, local and interactive format compared to AIR which is more successful as people's medium than traditional radio and that is for the community, by the community and about the community.
 - This new concept of 'local radio station' is not designed to earn profit.
 - It enables the community to eradicate poverty, reduce gender inequality, health, sanitation, etc. and ensure public participation at all potential levels.
- (Any other, any two)

- 3 What is a campaign? Make a slogan for the campaign on the problem of your choice.

Answer– Mixed use of various communication methods and materials such as meetings, excursions, newspaper articles, leaflets, and exhibitions on a subject to make awareness for a pre-defined period called a campaign.

Slogan for 'Corona Vaccine Awareness Campaign'

‘To stay protected from deadly corona disease.

Take the covid vaccine and remain at ease’.

(Any other slogan, anyone)

- 4 Information communication technologies are the future vessels of development’. Comment.

Answer–

Information and communication technology is an inclusive term that includes computer hardware and software, digital broadcasting, and telecommunication technology.

- i. All countries in the world are using information and communication technology today to access information and providing information and knowledge to their public.
- ii. The growing use of mobile phones all over the world has made it more convenient for the common man to access the market and public conveniences and services. A variety of services such as banking, shopping, health related, business transactions, etc., are readily available on mobile phones through Internet.
- iii. Information communication technologies are also the future vessel of development because through this, it will also be possible to improve the quality of livelihood of the poor and backward people.
- iv. The use of information and communication technology has brought about a number of significant changes in the economic, social and political spheres.

(Any other, any two)

Short Answer Questions (3 Marks)

- 1 In what ways are community radio more effective than ‘Vividh Bharati’ radio? Explain the difference between the two.

Answer:

Due to the popularity of radio as a medium of communication, AIR has introduced a new concept of 'Local Radio Station' in which broadcast journalism professionals have an important role to play. It is run and managed by locals and the content is meant for local use in their local dialect. The local radio station generally supports local programs of development. This gives people an opportunity to participate and express their views and showcase their talents. Thus, radio becomes the voice of the people, which is the catalyst for the development of the people.

Difference between the two-

Community Radio	‘Vividh Bharati’ Radio
(i) Community Radio is a new interactive and local radio format. This radio is by community, about community and for the community.	(i) All India Radio or Aakaashvani is a radio station run by the Government at the national level.
(ii) It is not designed to earn profit.	(ii) It is designed to earn profit through advertisements.
(iii) With a small investment, a radio station can be set up with possible transmissions in a limited area.	(iii) It is broadcasting at the national level. Hence setting up of radio stations would need large investments.
(iv) It is run and managed by locals and content is in their local dialect.	(iv) National level programmes are being broadcasted in Hindi and English. However, each state also has a regional channel.
(v) There are programmes related to issues of community interest. such as poverty alleviation, gender inequality, health, sanitation, etc.	(v) Vividh Bharati’ is the most popular service of All India Radio. It is also called ad broadcast service.
(Any other, any two)	(Any other, any two)

- 2 'ICT is used as an empowerment tool of development communication'. State its six uses during the recent corona pandemic period?

Answer:

ICT is a way to communicate with people mainly through computers, videos, telephones, fax machines, mobile phones, radios, televisions, and satellite communications.

- i. The use of mobile phones has made the world smaller. They have enabled and facilitated markets, social trade, and public services during the Covid-19 pandemic conditions.
- ii. Corona information was first provided by the government through mobile phones.
- iii. The ICT has also eased the use of economic services such as banking and financial transactions, marketing, distribution, employment, and public services through various means.
- iv. Educational material is now available in any form through internet and mobile phone.
- v. School and college teachers are also using the benefits of ICT and conducting students' exams online on computer or mobile phones.
- vi. ICT is proving to be economically, socially, and politically transformative. People are not just using their phones to connect with people around the world but are also making bill payments through their phones and taking online health sessions.
- vii. The ICT industry saw a dramatic increase in demand and profits, during the Covid-19 epidemic, which is certainly unprecedented.

(Any other, any two)

- 3 What are the essential features of development communication?

Answer:

- i. It is mainly helpful in making people informed, educated, and aware.
- ii. This is helpful for improving the standard of living of the people belonging to backward, weak, and neglected society / community.

- iii. The use of information on available technologies is helpful for the advancement of public community in education, health, agriculture, environment etc.
- iv. It is helpful in sensitizing people to the process of development and training them on issues related to an equal, just, and fair society.
- v. Strengthens and provides persistence to governmental organizations, non-governmental organizations (NGOs) and people-to-people affiliations.
- vi. It aims to increase knowledge and strengthen practical skills of students, current and future journalists, campaigners, and media professionals on development issues.

(Any other, any two)

Long Answer Questions (4 Marks)

- 1 The Red Ribbon Express was launched in India on World AIDS Day, December 1, 2007. It was a nationwide communication campaign to create awareness about HIV/AIDS. Through various information education communication (IEC) methods, information about dangerous diseases is disseminated to the population. Answer the following questions in regard to Red Ribbon Express.
 - a. What was the primary objective of this programme?
 - b. IEC was used to spread information about diseases. List the activities undertaken.
 - c. Which national and international agencies were involved in this programme?

Answer-

- a. Objectives of Red Ribbon Express-
 - Spread information regarding primary prevention services.
 - Develop an understanding of the disease, to reduce stigma and discrimination against people with AIDS
 - Enhance people's knowledge about preventive measures, health, habits and lifestyle.

- b. Information Education Communication (IEC) activities such as street play/Nukkad Natak, Folk Songs, Stories and Group Counseling Sessions.
- c. National and International Agencies involved
 - National AIDS Control Organisation (NACO),
 - Nehru Yuva Kendra Sangathan
 - UNICEF and UNAIDS etc. (international agencies)
 - Indian Railways.
 (Any Other)
- 2 'Radio holds higher importance than print media or television as a source of Development communication'? Review the role of radio in this field.

Answer:

Radio is the most popular as a development communication source- Refer Points to remember number 8,9 and 10

Long Answer Questions (5 Marks)

- 1 Explain in detail any of the five skills needed for career in the field of development communication journalism.
Answer: Refer Points to remember number 18 (i) to (vii)
 (Any other, any five)
- 2 What are the different methods of development communication? Describe any two methods?
Answer: Methods of Development Communication- Refer Points to remember number 5
 Any two methods in detail- Refer to Points to remember number 6, 8, 11, 13 and 15 (write any two, any other)

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice questions

- 1 In the new approach of development, communication is -----
 - a. an important catalyst for change
 - b. an important cause of change
 - c. the only catalyst of change
 - d. not important in bringing about change

- 2 Which of the following is an engine of change in the 'traditional' to 'modern' society?
 - a. Development Journalism b. Development Communication
 - c. Development d. Public service broadcasting
- 3 _____ is the most widely available and affordable mass communication medium for disadvantaged groups.
 - a. Facebook b. Television
 - c. Radio d. Tele Centre
- 4 The objective of development communication is to ensure the achievement of individual capacity in which section of the society?
 - a. High income group people b. Disabled people
 - c. Deprived sections of people d. Development journalist

(B) Match the following

A. Television	i) 1969
B. Chatera Village Project.	ii) 2004
C. Development Communication 'Term'	iii) 1972
D. First Education Satellite	iv) 1959

Pick the correct option -

- a) A - iii), B - iv), C - i), D - ii)
- b) A - iv), B - i), C-iii), D - ii)
- c) A - ii), B- iv), C-i), D - iii)
- d) A - iv), B - iii), C- ii), D - i)

(C) Fill in the Blanks

- 1 The executive, legislature and judiciary are the three pillars of democracy, while _____ is considered to be the fourth pillar.
- 2 _____ serves as a medium of continuing education.
- 3 The aim of the Red Ribbon Express was to spread information across the country on the issue of_____.
- 4 The objective of the_____ is to provide full employment and self-sufficiency to women workers.
- 5 _____ governance, computer has made it possible to distribute public services and information at the doorstep of the people.

- 6 Development journalists can take the career as ----- or ----- on Doordarshan, radio.

(D) Picture Based Questions -

- 1 Identify the picture and name the method of development communication shown in this.



- 2 Identify the picture and name any two methods of development communication shown?



(E) Very short answer question-

- 1 Define development journalism.
- 2 Why is radio considered a good choice for development communication in all mediums?
- 3 Give two features of development communication.
- 4 How many districts and halt stations were covered by the Red Ribbon Express?

Case study based multiple-choice question (3 X 1 mark)

Every time a new medium emerges, it becomes a challenge for the old media to remain favourable in front of new. Before the advent of television, more than 60 percent of the printing media was fiction based. However, soon television became the preferred source of

entertainment and information for most people. Thus, printing media has also been inspired to shift more towards non-fiction content. News is reported in both television and print media. television delivers the latest headlines with fresh pictures or videos in no time, while the newspaper concentrates more on analysis of the incident and provides additional background information.

1. Which feature of television makes it an effective medium of development communication?
 - a. Live nature
 - b. Recreational means
 - c. Audio-visual mode
 - d. Reality shows
2. In which year, Television became a separate department from All India Radio as Doordarshan.
 - a. 1976
 - b. 1967
 - c. 1982
 - d. 1966

Or

Which of the following mediums transmits messages faster?

- a. Newspaper
 - b. Manuscript Magazine
 - c. Television
 - d. Cinema
- 3 Who is the person who conducts the talk shows on television?
 - a. Programme Guest
 - b. Set designer
 - c. Programme host
 - d. Live camera in charge

Or

Which of the following statements is incorrect?

- a. Newspapers need to be physically distributed to readers.
- b. Television has wiped out newspapers
- c. Television is a domestic medium
- d. This is the new media which is also interactive.

Short Answer Questions (2 Marks)

- 1 What is development communication and what is its role in development?
- 2 What is the significance of the Chhatera project??
- 3 Why are presentation skills necessary in the field of development communication and journalism?

- 4 Tina has got the opportunity to present some programmes in the community local radio station of her college. What would be her designation? What is the purpose of the community local radio station?

Short Answer Questions (3 Marks)

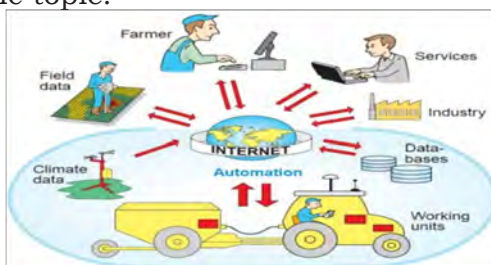
- 1 Explain the difference between the Sustainable Access in Rural India (SARI) and the Self-employed Women's Association (SEWA).
- 2 Describe the importance of development communication and journalism.
- 3 Give any three differences between the print media and the electronic media.

Long Answer Questions (4 Marks)

- 1 Mention the scope and career opportunities in development communication.
- 2 Briefly describe the four methods of development communication.
- 3 Ramesh is planning to start a social advertising agency with his friend. Educate Ramesh in detail about the four key skills needed to be a successful development communication professional.

Long Answer Questions- (5 Marks)

- 1 Describe the knowledge and skills needed for career in the field of communication and journalism.
- 2 List five major issues in which our country is still lagging and where various means of development communication require a nation-wide drive to sensitize the public. Present the main points from the detailed plan chalked out by you on any one of the above issues.
- 3 You have been asked to contribute to the school-run campaign on personal and environmental hygiene for the class project. Write a slogan for each on these topics. Also give a message through a poster on any one topic.

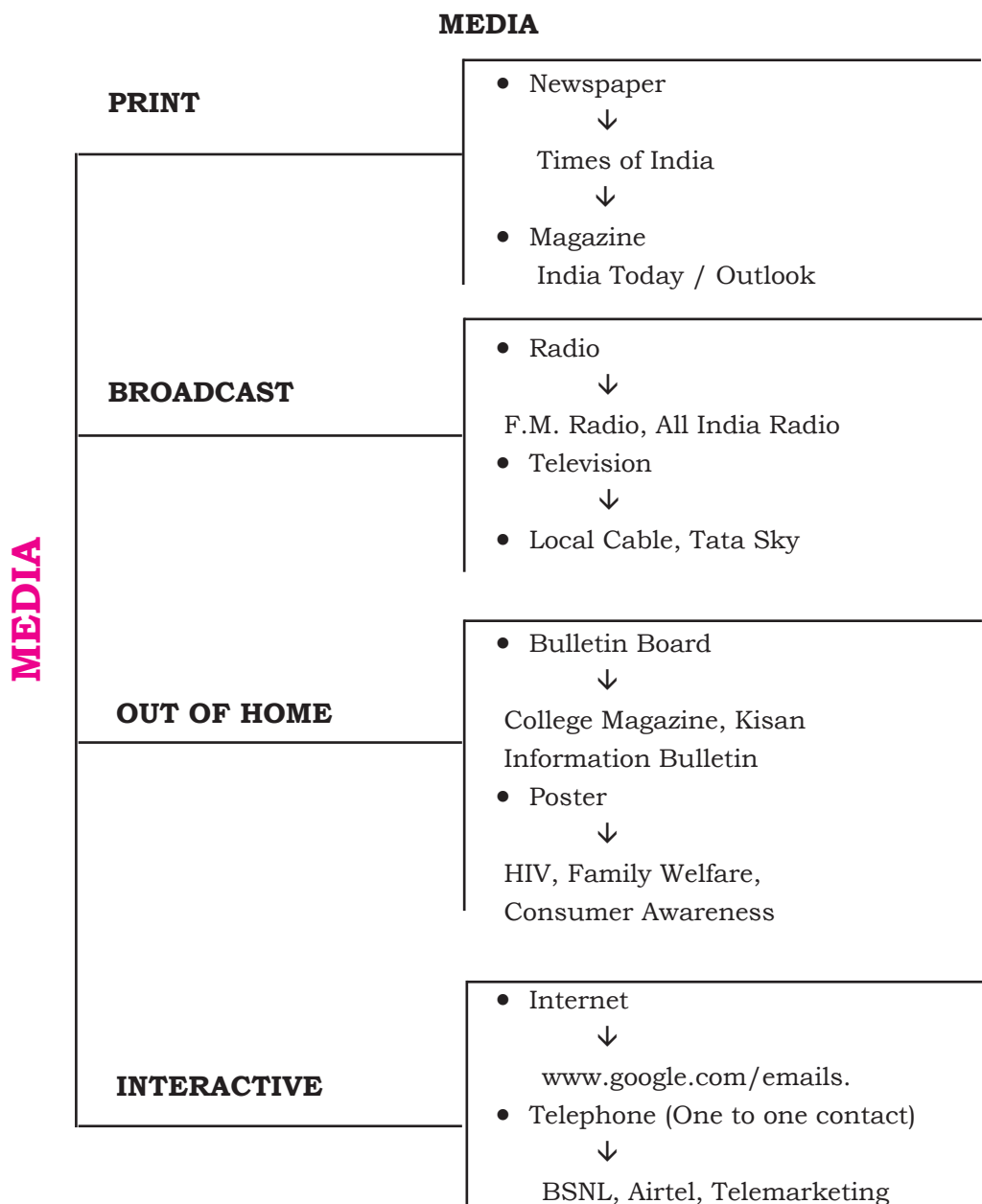


Use of Information Communication Technology by various sectors.

18 MEDIA MANAGEMENT DESIGN AND PRODUCTION

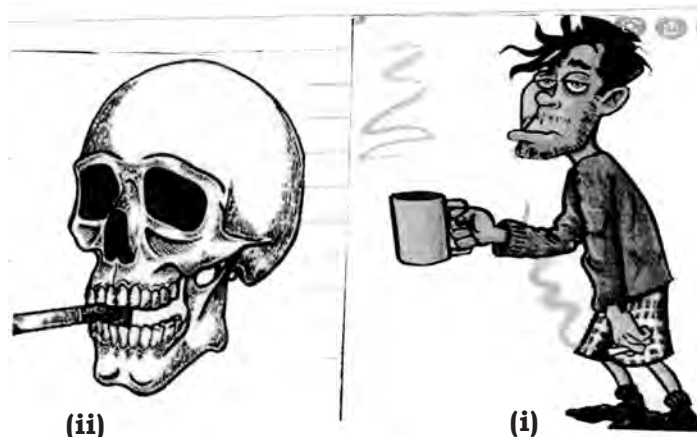
‘POINTS TO REMEMBER’

1. Media plays a significant role in shaping present day society.
2. Most of the people like to have outfits hairstyles and dresses actors/actresses that they see on television or in films.
3. Media influences public perceptions on a variety of important issues and shapes modern culture by selecting and portraying a particular set of beliefs, values and traditions.
4. For any item in the media to have success and impact, it has to be planned, designed and produced well.
5. All the above processes are part of Media Management. Media management is considered to be one of the most important part of any promotional strategy.
6. The success of various publicity campaigns depends to a large extent, on media planning and media management.
7. Importance - In an age of globalization and liberalization media plays a significant role. Media's role in this society is fundamentally a function which tells -
 - i. How the society chooses to use the media.
 - ii. Media's relationship with society is both reflexive (automatic) and varied.
 - iii. The mass media simultaneously affects and is affected by society.
8. Media - This is a term used for all type of print, broad cast, out of home and interactive communication They are tools used to store and deliver information.



9. Media can be understood in two contexts.

- i. Media as an end product or campaign design
- ii Media as a channel of vehicle or medium.



10. No product can be considered of good quality unless sufficient efforts have been made right from the stage of planning. Media professionals have to do a lot of planning before producing a specific item.
11. Media planning– It is a process of determining most cost effective and influential mix of media for achieving a set of pre-decided objectives. In other words it's the process of designing a course of action that tells how advertising time and space will be used to contribute to achieve advertising and marketing objectives.
 - Media planning involves not only selecting a medium for advertisement but also analysis of the outreach of the advertisement. For example many media planners select unconventional streams of advertising such as mobile vehicles and advertising in small retail stores.
 - Cost is an important factor for any producer as he will not have unlimited money and has to manage within budget. For example for selling garments,
 - i. The shop owner can circulate leaflets in the area.
 - ii. Put up a big banner/ poster at an appropriate spot.
 - iii. Prepare a commercial for the T.V.

The media planner will select the media after considering the media budget and its reach. As in the case of college students, they will select the most economical media having greatest reach for a Winter collegiate fest. This means maximising impact of media and at the same time minimizing the cost of the production. Therefore, media planning is done to communicate information to bring out desired change.

Media planner considers four criteria : -

(i) reach (ii) frequency (iii) continuity (iv) cost.

12. There are certain essential points that should be kept in mind while planning designing, producing and finally implementing a media message/strategy. They are:-

- i. Felt needs and interests of the audience.
 - Type of information needed
 - Amount of information needed.
 - Purpose of information
 - Understanding and comprehension level of the audience.
- ii. Time and Duration
 - Moment (exact point of time) at which a media, message of communication product to be launched or is to be delivered to the intended audiences.
 - Duration (Amount of time allotted for delivering the message) for which a media, message or communication product is to be delivered
 - Frequency (number of times) at which a media, message or communication product is to be delivered.
- iii. The 'Mood' of audience (emotional or mental state)
 - At the time 'when' the audiences receive or are exposed to the media, message or communication product presented.
 - At the time 'when' the audiences give their response for a media, message or communication product presented.

Factors affecting the "Mindset" (Way of thinking) of audiences.

This is governed by multiple factor such as

- Socio cultural factors
- Economic factors
- Political background
- Education
- Age
- Gender
- Learning
- Social marketing issues and social communication network.

iv. Media - Media means medium / channel/vehicle and media mix /IEC/BCC

- Different media have different delivery features. A single communication vehicle is not generally able to reach everyone in the target audience due to variation in the level of reach, availability and accessibility and proper exposure of audience to the media. Therefore it includes.
- Decision on use of 'one or more number of media vehicles in one production' as per the requirement, audience type, budget, reach, accessibility and availability facility of channel to the intended audiences.
- Decision on use of 'result oriented media planners to maximize the use/enhance penetration of all types of media channels that connect with the audience.
- Decisions on use of 'one or more number of media methods mix in one production 'as per the requirement, audience type, budget, reach and availability of media to maximise the possibility of understanding the message easily in a heterogeneous audience group.
- Decision on using "result oriented media planners to maximise the use of "all type of media mix' that connects with audience again to provide a variety to make message more understandable in a heterogeneous audience group.

v. Treatment - It is the 'way and form' in which a media, message or

communication product is carried to the intended audiences. The form could be rational or emotional, folk, tribal or modern, musical or dramatic; simple tagline / punch line or descriptive / narratives; audio or visual or both.

Here the format in which the information is needed by the audience is important.

It could be

- For the whole set of media package
- For a single media message or communication product.

- vi. Content type and clarity - It is the extent to which any media, message or communication product is able to convey the concept or issue correctly and easily in its intended meaning. In true sense it was planned for the target audience. While deciding on the content for media message or communication product for an intended audience following points should be considered.

- Decision regarding use of subject matter to be included.
- Decision regarding use of kind and type of language:
- Decision regarding mode for presenting content for clearly conveying the concept or issue.
- Decision regarding “written (script) or pictorial presentation (type, form and quality of pictures) of the content” for clearly conveying the concept or issue.
- Therefore, all efforts should be made to present the message as clearly as possible so that it is interpreted and understood by the intended audiences in its intended meaning.

- vii. Credibility - Credibility of the message sent by media depends on the following.

- The sender of the organisation campaigning the issue
- Relevance of the issue for the receiver.
- Audience's personal likes and dislikes.
- Content chosen and its way of presentation.
- Medium of communication of media message or communication product for an intended audience.

- viii. Use of person, product or model.
 - Which person, product, or model to be used for presenting the issue or content
 - Type and form of elements to be added for the promotion of a particular issue or product through a media, message or communication product

13. Cost and Media Budget

Media campaign development often requires large budget. Any social communication campaign related the social development in extension education involves high cost. If budget permits it is advisable to use a mix of more than one medium on media types for an ad campaign.

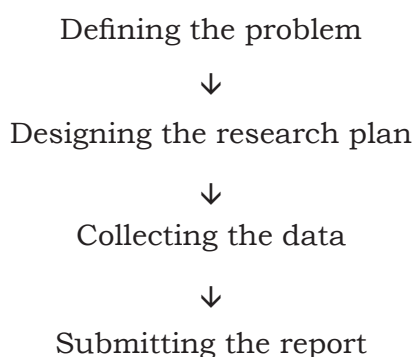
14. Media Designing and Production

Media designing and production is done for various reasons.

- i. Providing initial information or introducing a concept.
- ii. Idea or product.
- iii. Message for promotion of an idea.
- iv. Message or a product for awareness generation.
- iv. For providing knowledge.
- v. For providing varied issues of importance.
- vi. For providing skills training.

15. Steps Involved in Media Design and Production ?

- i. Media research plays a major role in increasing and understanding of the audience.



Media research or audience research is carried out in two phrases-

1. Pre-production
2. Post-execution to take feedback.

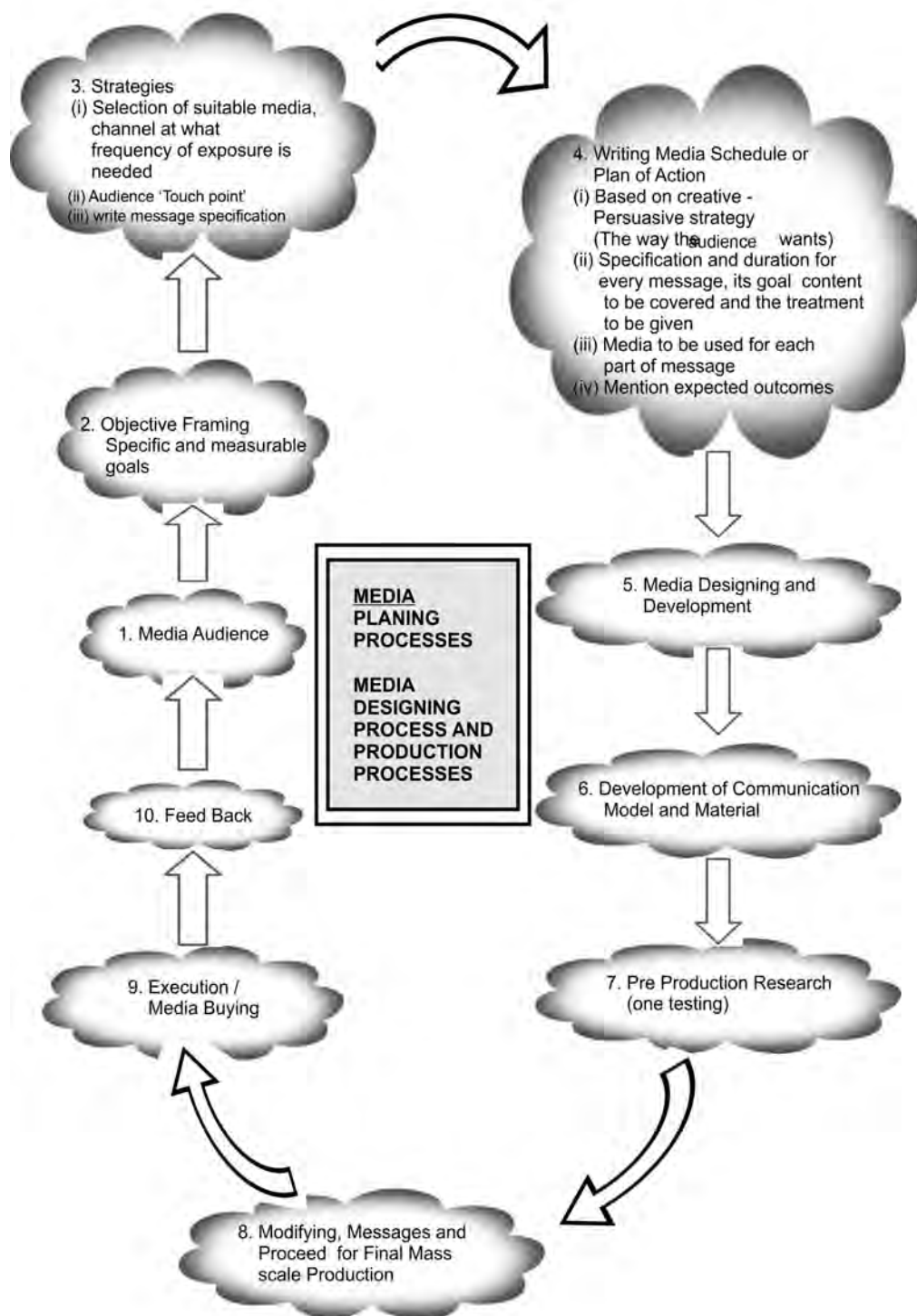
ii. Identifying Media/Medium Effectiveness.

iii. Coverage : On an average people spend 85% of their media time with broadcast media (radio, television) and only 15%, with print media (newspaper, magazines, folders etc.)

- The broadcast commercials are more intrusive than message given through print media since programme commercial on social issues are presented in a stream one after another.
- Readers of print media can select stories and ads or ignore them but in broad cast media this choice and freedom is either not there or is very limited.

Little bit flexibility is possible due to use of control.

- iv. Distribution wise/ownership wise coverage of media.
- v. To how many people subscribe or own a medium
- vi. Readership/viewship of any media/medium
- vii. Actual number of people who read or view the medium
- viii. Pass along rate of any media/medium – 'Pass along rate' is the number of people who read the print medium in addition to actual subscribers and buyers. This could be almost three times the circulation number.
- ix. Audience measurement in terms of exposure its any media – Exposure to any broadcast media is measured in terms of 'rating points'.
- x. Rating point – Rating point is the percentage of a communication of the coverage area or marketing universe that has been exposed to a media programme/medium
- xi. Media Budget/Pricing factor : Normally cost of purchasing a media depends on duration of time given to the slot. Timing is directly linked with estimated size of viewers structure background. Life style, setting rural, urban tribal etc.



The growing importance of communication, budgeting – It can be contributed to increasing media costs, rise in competition and the increased focus of top management on productivity in company's operations.

- xii. Format of available medium : For instance, there are different radio formats such as news station, talk radio music, vocal, classical, light, as well as instrumental. Each format attracts a definite type of audiences, listeners.
- xiii. Types of Audience, listeners/viewers/ readers : Selection and development of media should be based on media characteristics, reach and access, audience. segmentation and essentially should be tested in real life situation.
- xiv. Buying Behaviour – Advertisers develop advertising campaigns effectively by understanding audience behavior. Audiences will pass through as series of steps before making a purchase which include problem recognition, information search, alternative evaluation, and acceptance /adoption evaluation. Problem recognition results when there is a considerable difference between the actual state of affairs and desire state of affairs of the audience.

16. Media Evaluation and Feedback

There are two types of feed back.

- 1. Immediate Feedback : Immediate order, buying, asking questions, queries on interacting in same or other way to get more information after a message is launched.
- 2. Delayed Feedback : Response given at a later time. This does not mean that the message has no impact but, for example, in advertising the impact comes at points when the audiences is planning a purchase or making final decision.

17. Strength and Weakness Of Major Media

Medium	Strength	Weakness
Newspaper	<ul style="list-style-type: none"> • Reading, Educations & income • Tangible • Readers, habit, loyalty Involvement • Short lead time • Low production cost • High one time reach • Good for detailed copy 	<ul style="list-style-type: none"> • Poor reproduction & colour • Decreasing readership • Clutter • Media waste • Mass audience
Magazines	<ul style="list-style-type: none"> • Audience selectivity • Expertise environment • Higher quality reproduction • Long life • High Credibility 	<ul style="list-style-type: none"> • Long lead time • Low mass reach • Costly production • Low frequency • Weekly, monthly or quarterly
Television	<ul style="list-style-type: none"> • Impact: Sight, sound montion • Local and national • Targeted Cable Channels 	<ul style="list-style-type: none"> • Broad audience • High production cost • Intrinsive • Message short lives.
Radio	<ul style="list-style-type: none"> • Audience selectivity • Theatre of the mind • Frequency builder • Relatively low product cost 	<ul style="list-style-type: none"> • Background (low attention) • Low search • Sound only • Messages short lived

Outdoor	<ul style="list-style-type: none"> • Localised • Frequency builder • Directional signage 	<ul style="list-style-type: none"> • Low attention • Short exposure time • Poor reputation (Visual Pollution) • Zoning restriction
Direct Mail	<ul style="list-style-type: none"> • Highly selective • Measurable result • Can be personalised • Demands attention 	<ul style="list-style-type: none"> • Clutter/Junk mail perception • High cost per message • Long lead time
Tele Marketing	<ul style="list-style-type: none"> • Personalised • Real time interaction • Attention getting • Measurable results 	<ul style="list-style-type: none"> • Costly • Intensive
Internet	<ul style="list-style-type: none"> • Mass addressable • Can be personalised • Extremely low cost • Can be interactive 	<ul style="list-style-type: none"> • Clutter • Limited reach • Limited creative options.

18. Scope

- The student of media management get exposure through case studies and internships. Students assignment include the analysis of development and progress of media in the society.
- Many existing businesses, require people who can handle the use of media for advertising, promotion, image building. Therefore, people with media planning and management experience and degree in communication will be valued in lot of industries.
- Print media, advertising, man media, electronic media web publishing and mass communication have opened up a new spectrum of job opportunities.
- With the explosion of television channels and a number of 24/7 channels it has opened up career opportunities in electronic media.

- v. Career options are present in public broad casting agencies like Doordarshan and All India Radio or in private broad casters.
- vi. Other fields like direction, production, camera, graphics, editing, sound, programme research, script writing etc also offer careers to media students.
- vii. Moreover one can open his /her own TV/FM Radio Channel.

19. Required Skills for Careers in the Field of Media

Anyone desirous of entry in the media must be-

- i. Hardworking, self-confident, well versed in the required skills.
- ii. Must possess excellent communication skills.
- iii. Those who can project themselves effectively in group discussion, interview, actual working on the desk and in the field, will be able to enter the field.
- iv. They must be able to think clearly, write clearly for print/electronic/Internet/web media with an eye on the readers viewers', and users' requirements and their level of understanding.
- v. Their written 'copy' should mean value addition to its target audience.

20. Career in Media Management, Design and Production

- i Business and industries require people to handle use of media for advertising, promotion, image building enlarging and expanding their companies
- ii. With print media, advertising, mass media, electronic, media, web publishing, Doordarshan and All India Radio or with private broad casters.
- iii. As a field reporter, writer, editor, researcher, correspondent and in-studio anchor, presenter and news analyst.
- iv. Work in fields like direction, production, photography graphics, editing, sound, programme research, script writing etc.
- v. Entrepreneurial initiatives

DEFINITIONS

1. **Pass Along Rate** - It is the number of people who read the print medium in addition to actual subscribers and buyers.

2. **Rating Point** - Rating point is the percentage of a communication of the coverage area of marketing universe that has been exposed to a media programme.
3. **Media** - This is an umbrella term used for all type of print, band cast, out of home and interactive communication They are tools used to store and deliver information.

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple Choice Questions

9. Which of the following is not a key criteria for media ?

- | | |
|---------------|------------|
| a. Reach | b. Cost |
| c. Continuity | d. Message |

Ans: d) message

2. Which of the following factor does not govern the mindset (ways of thinking) of audiences?

- | | |
|--------------|-------------------------|
| a. Social | b. Frequency |
| c. Education | d. Political background |

Ans: b. Frequency

3. Which of the following is not a step of media planning process?

- a. Identifying group
- b. Deciding and developing media strategies
- c. Deciding and defining media objectives
- d. Friendship of group

Ans: d. Friendship of groups.

4. Which of the following is example of print media?

- | | |
|----------------|--------------|
| a. Radio | b. Internet |
| c. Televisions | d. Newspaper |

Ans: d) Newspaper

5. Media designing and production is not done because of -

- a. Providing initial information b. For providing knowledge
- c. For providing skill training d. For identifying the group

Ans: d. For identifying the group.

(B) Match the following:

- | | |
|----------------|------------------|
| A. Radio | i) Magazines |
| B. Internet | ii) Television |
| C. Print Media | iii) Light Music |
| D. Broad Cast | iv) Transmission |
- to group of people

Pick the correct option-

- a. A - i), B - ii), C - iii), D - iv)
- b. A - iv), B - iii), C - i), D - ii)
- c. A - iii), B - iv), C - i), D - ii)
- d. A - iv), B - i), C - ii), D - iii)

Ans: c) A - iii), B - iv), C - i), D - ii)

(C) Fill in the blanks:

1. Media's relationships with society is both reflexive and _____.
2. _____ is an umbrella term used for all type of print, broadcast, out of home and interactive communication
3. The discipline of communication exposes its students to media _____.
4. In an age of _____ and liberalization and media plays a significant role.
5. Media Management is considered to be one of the most important part of any _____ strategy.

Ans: 1. Varied, 2. Media, 3. Management 4. Globalisation, 5. Promotional

(D) Very short answer question (1 Mark)

1. What is the role of Media in a society?

Ans. Media's role in this society to fundamentally a function of how this society chooses to use this media.

2. Media can be understood in the two contexts. What are they?

Ans. Media can be understood in the following contexts.

- i. Media as an end product on campaign design.
- ii. Media as a channel or medium.

3. Write unconventional streams of advertising selected by media planners.

Ans. i. Mobile vehicles advertisements.
ii. Advertising in small retail stores.

4. Write any two weaknesses of magazines.

Ans. i. Low mass reach.
ii. Costly production.

Case Study Based Multiple Choice Questions (1 Mark × 4)

Careers in media have become careers of choice today. Print media, advertising, mass media, electronic media, web publishing and mass communication have opened up a new spectrum of job opportunities to young college graduates with the drive to succeed. The chance of growth, both vertical and Lateral, are very bright and with the explosion of television channels the faceless media persons have acquired the status of household personalities .

1. Which of the following is the weakness of direct mail?

- a. Clutter/Junk mail perception
- b. High cost of production
- c. Media waste
- d. Low attention

Ans: a) Clutter /Junk mail perception.

2. Which of the following is not a part of Immediate Feedback?

- a. Immediate order
- b. Asking question
- c. Buying
- d. Selling

Ans. c) Selling

3. Which of the following format does not belong to Radio?

- a. News station
- b. Newspaper
- c. Talk radio
- d. Instrumental

Ans. b. Newspaper

4. Which of the following statement is wrong incorrect?
- Person of all ages like to watch television.
 - Media management, design and production is not important.
 - Media professionals have to work very hard while planning a campaign.
 - Different media forms send message in different ways.

Ans. b. Media management, design and production is not important.

Short Answer Questions (2 Marks)

1. Which points are to be borne mind while understanding needs and interests of the audience?

Ans. i. Type of information needed.

- Amount of information needed.
- Purpose of information
- Understanding and comprehension level of the audience.

2. What are the four key criteria that a media planner considers ?

Ans. i. Reach

- Frequency
- Continuity
- Cost

3. How is the decision about the use of person, product or model is taken while preparing a media strategy?

Ans. It is a decision about.

- Which person, product, or model to be used for presenting the issue on content.
- Type and form of elements to be added for the promotion of a particular issue on product through media, message or communication product or package.

4. Write any four strengths of magazines.

- Ans.** i. Audience selectivity
ii. High credibility
iii. High quality production
iv. Long life

Short Answer Questions (3 Marks)

1. Which points are kept in mind while deciding and developing media strategies?

- Ans.** i. Media budget or cost
ii. Deciding the most creative and environmentally compatible media .
iii. Media or environment that is most compatible to issue or product to be campaigned.

2. Define media and give names of various formats of media with examples?

Ans. Media - This is a term used for all type of print broadcast, out of home and interactive communication. They are tools used to store and deliver information. Various formats of media are :

- i. Print – Newspaper, magazines
 - ii. Broadcast – Radio, television
 - iii. Out of home – Bulletin Board, Poster
 - iv. Interactive – Internet, Telephone.
3. List various factors affecting the 'mind set' of audiences?

Ans. It is governed by multiple factors.

- i. Socio-cultural factors ii. Economic factors
- iii. Political background iv. Education
- v. Age vi. Gender

Long Answer Questions (4 Marks)

1. On which four points does the credibility of messages sent by media depend?

Ans. The credibility of messages sent by media depend on following points.

- i. The sender or the organization campaigning the issue.
 - ii. Relevance of the issue for the receiver.
 - iii. Audience's personal likes and dislikes.
 - iv. Content chosen and its way of presentation.
2. Compare the strengths and weaknesses any four formats of media.

Ans. Refer to Points to Remember Number 17

3. "A single communication vehicle seldom reaches everyone in the target audiences". Explain.

Ans. Refer to Points to remember No. 12 (iv)

Long Answer Questions-(5 Marks)

1. What is the scope of media management, design and production?

Ans. Refer to Points to remember No. 18

2. What are the various career options available in the field of Media management, design and production.

Ans. Refer to Points to remember No. 20

PRACTICE QUESTIONS

OBJECTIVE TYPE QUESTIONS (1 MARK)

(A) Multiple choice questions

1. Which of the following is a weakness of a magazine?
 - a. Poor quality
 - b. Clutter
 - c. Costly production.
 - d. Mass audience
2. Whoever the producer, _____ is an important factor because he will not have unlimited money.
 - a. Cost
 - b. Design
 - c. Production
 - d. Reach
3. Information given should be as desired by _____ not communicators wants to convey.
 - a. Planner
 - b. Audience
 - c. Speaker
 - d. Producer

4. What is included in time and duration ?
 - a. Moment
 - b. Purpose of information.
 - c. Frequency
 - d. Both 'a' and 'c'
5. What needs to be spent for the development of media, message or media product?
 - a. Money
 - b. Time
 - c. Labour
 - d. Energy

(B) Match the following

- | | |
|--------------|--------------------|
| A. Telephone | i) F.M. |
| B. Poster | ii) e-mail |
| C. Radio | iii) Airtel |
| D. Internet | iv) Family Welfare |

Pick the correct option-

- a. A - iii), B - iv), C - i), D - ii)
- b. A - i), B - ii), C - iii), D - iv)
- c. A - iv), B - iii), C - ii), D - i)
- d. A - i), B - ii), C - iii), D - iv)

(C) Fill in the blanks

1. Most of the people spend _____ of their media time with broadcast media.
2. Tasks and duties of media are increasing day by day. Therefore media management _____ and _____ are very important.
3. Mediaplanning involves not only selecting a medium for _____ but also analyses of the outreach of the advertisements.
4. _____ is the percentage of a communication of the coverage area or marketing universe that has been exposed to a media programme.
5. Media _____ plays a major role in increasing understanding of the audience.

(D) Picture Based Questions -

1. What does the following picture depict?



Very short answer question (1 Mark)

1. On which level do the media professional have to work for preparing a strategy?
2. How is media/message carried to the intended audiences after treatment? Give two examples.
3. What is 'Pass Along Rate' of any medium?
4. Write two weaknesses of Radio as Media?

Case Study Based Questions (1 Mark × 3)

1. Cost are incurred for developing and producing a media, message or communication product. Media campaign development often needs a single large budget and involves high cost in any social communication campaign related to social development issues in extension, education. If budget permits, it is advisable to use mix of more than one medium or media types for an ad campaign.

Asking questions, queries, interacting in same or other way to get more information are the example of -

- | | |
|-----------------------|-----------------------|
| a. Immediate feedback | b. Delayed feedback |
| c. Normal feedback | d. Monetary feed back |
2. Which of the following is the unconventional way of advertising?

a. Through magazine	b. Through mobile vehicles
c. Television	d. Radio

Or

For any item in the media to have success and impact, it has to be _____ and _____ well.

- a. Planned b. Organised
- c. Produced d. Both 'a' and 'c'
- _____ is the percentage of households or persons using a radio or TV at a particular time who are tuned to a particular station.
- a. Rating point b. Coverage
- c. Pricing factor d. Both 'b' and 'c'

Or

Media is used to _____ and _____ information

- Store
- Publicity
- Deliver
- Both 'a' and 'c'

Short Answer Questions (2 Marks)

1. What do you understand by buying behaviour?
2. What is the meaning of media management?
3. How is the decision about use of person, product or model taken?
4. Write two steps of media research or audience research.

Short Answer Questions (3 Marks)

1. What is the importance of coverage in Media management, design and production?
2. What are the main factors affecting Media budget?
3. Write three strength and weaknesses of any three media formats.

Long Answer Questions (4 Marks)

1. How many types of media evaluation and feedback are there? Write difference between them?
2. Whoever the producer, cost is an important factor." Explain with the help of example.

Long Answer Questions (5 Marks)

1. What are the various skills and abilities need to be developed by a person for entering in the field of media?
2. Write the steps of Media design and production?
3. Plan a media campaign for an addresscent to promote the idea of prohibition of alcohol/ promoting the idea of no smoking, as per the process explained in media planning and designing productions.

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SAMPLE QUESTION PAPER (2020- 2021)

Class-XII Home Science (064)

Time - 3 hours

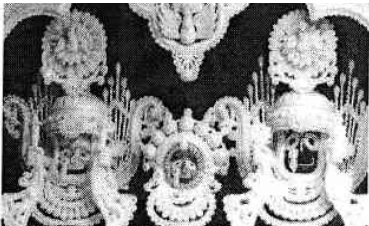
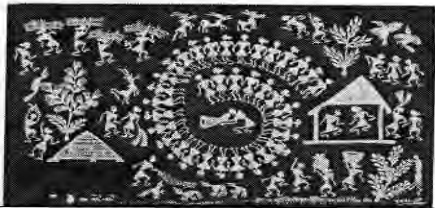
M.M-70

General Instructions-

1. All questions are compulsory.
2. There are total 36 questions.
3. Question paper is divided into three sections-A,B and C.
4. Section A has question no. 1 to 14 (Objective type questions) and are of 1mark each.
5. Section B has question no. 15 to 21 (Case study based multiple choice questions) and are of 1 mark each.
6. Section C has question no.22 to 27 of 2 marks each, question no.28 and 29 of 3 marks each, question no.30 to 33 of 4 marks each and question no.34 to 36 of 5 marks each .
7. Internal choices are given in some questions.
8. Support your answers with suitable examples wherever required.

SECTION A (OBJECTIVE TYPE QUESTIONS)		
S.No.	Multiple choice questions	Marks
1.	Identify the new constituent present in food which was found by researchers that have physiological or biological activity and influence health. a. Nutraceuticals b. Medical foods c. Antioxidants d. Phytochemicals OR Mrs. Verma avoids consuming spinach because of the presence of which non nutrient constituent in it- a. Flavonoids b. Phenols c. Lactose d. Oxalates	1
2.	In what way job effectiveness in any work place can be improved? a. Increasing errors b. Increasing productivity c. Reducing error d. Both b) and c)	1

3.	In 1810, _____ developed the method of canning. a. Louis Pasteur b. Napoleon Bonaparte c. Nicolas Appert d. Harvey Levenstein	1
4.	You got a job in hotel and your responsibility is to organize, supervise and control all uniformed services. You must be appointed as a. Receptionist b. Lobby Manager c. Bell captain d. Telephone operator OR You got a job in hotel and your responsibility is to coordinate with front office for information on departure of guests and get vacated room cleaned You must be appointed as a. Floor supervisor b. Room attendant c. Desk control supervisor d. Assistant housekeeper	1
5.	Red Ribbon Express project was implemented by a. Indian roadways b. Indian railways c. Indian airways d. Indian waterways	1
6.	Match the following- a. Manufactured food i. Lactose free milk b. Medical food ii. Bread c. Formulated food iii. Enzymes used in food Industry d. Synthetic food iv. Papad Pick the correct option a. a - iv), b - i), c - ii), d - iii) b. a - ii), b - i), c - iv), d - iii) c. a - iv), b - i), c - ii), d - ii) d. a - iii), b - ii), c - iv), d - i)	1

7.	Salmonella exists in the intestinal tract of animals, raw milk and eggs but it can be destroyed by- a. Heating b. Cooling c. Refrigeration d. Deep Freezing	1
8.	_____ is responsible for planning, organizing and controlling the kitchen operations. a. Executive chef b. Kitchen steward c. Chef-de-parties d. Deputy chef	1
Fill in the blanks-		
9.	The term _____ was first coined in 1972 by Quebral. OR _____ is a brief message between radio programmes ,generally in the form of jingles.	1
10.	The word Ergonomics is derived from two Greek words _____ and _____ .	1
11.	Identify the craft and name the state in which it is practiced.  OR Identify the painting and name the state where it is popular. 	

12.	Draw the standardized mark found on pure silk garments.	1
13.	Predict two benefits of SEWA for local group of women.	1
14.	<p>After schooling, your elder sister completed her training in ECCE (Early Childhood Care and Education). Suggest two wage employment opportunities available to her.</p> <p style="text-align: center;">OR</p> <p>What two skills should Sudha possess to work as an early child care professional?</p>	1
SECTION B (CASE STUDY BASED QUESTIONS)		
	<p>Malnutrition is the underlying cause of at least 50 per cent of deaths of children under five years of age. The statistics for nutrition-related problems in our country reveal an alarming situation:</p> <ul style="list-style-type: none"> • Almost one-third of the infants born in India are low birth weight babies. Low birth weight may have adverse effects throughout their growing years and may have adverse implications even in adult life. Low birth weight may even lead to child mortality. • There is widespread prevalence of growth retardation among preschoolers (from socio-economically disadvantaged families) and almost half the children suffer from mild and moderate under nutrition. • A large proportion of children (and adults) suffers from micro nutrient deficiencies in varying degrees of severity. The micro nutrients of most concern are iron, zinc, vitamin A, iodine, folic acid, B12 	1


	interlacing in others or may be colored in other patterns. Which word can be used for brightness of a colour? a. Value b. Intensity c. Hue d. Complementary	1
20.	Colours are said to be contrasting if they are _____. a. Different in lightness and darkness b. Light in value c. Dark in value d. Bright and intense OR Yellow-orange, red-orange, and yellow-green are examples of _____. a. Intermediate or Tertiary colour b. Secondary colour c. Primary colour d. Triadic colour	1
21.	Which of the following visual elements is concerned with the shade of a colour? a. Line b. Texture c. Value d. Size OR When white colour is added to any other colour, it is called as-----of a colour. a. Shade b. Tone c. Tint d. Hue	1
	SECTION C	
22.	"A healthy environment is a positive work environment". Write any four ways by which a teacher can create healthy environment in her class. OR Write any four personal attributes which should be possessed by an entrepreneur.	2
23.	Compare two advantages and disadvantages of food / diet based approach used to combat public nutrition problems.	2

24.	Elaborate on the four stages of Guest cycle. OR Enlist any four functions of housekeeping department.	2
25.	"ICT is a powerful tool of development communication and informing people." Support this statement with four reasons.	2
26.	Enumerate any four primary requirements when preparing for a career in the field of Care and maintenance of fabrics.	2
27.	Why were children's homes formed? Indicate the need of three kinds of children's homes.	2
28.	You have bought a silk fabric to get a frock stitched for your younger sister. Illustrate three different ways to create "Rhythm" in the frock.	2
28	Why are elderly vulnerable? Give any two reasons to support your answer.	2
29.	Name any two programmes operating in our country for elderly people. Also tell about two administrative skills required to work with organizations running for elderly people. OR Why were Nehru Yuva Kendras established and list any four programmes run under these kendras?	2
30.	You are working in a hi-tech laundry of a hotel. a. What four factors will you keep in mind before choosing the process of washing a fabric? b. You are using a dryer to dry the washed fabric. Explain the two types of circulation system in a dryer. OR How are the laundry in hospitals different from a hotel?	2

31.	A food hazard can enter/come into the food at any stage of the food chain, therefore, adequate control throughout the food chain is essential. Explain three ways with two features of each to ensure food safety and quality. Also state two importance of FSSA,2006.	4
32.	Mr. Anil wants to open up an institution for children. a. Guide him about any four principles given by NCF(2005) to be kept in mind. b. Which four facilities must be included in the institution for children?	4
33.	Elaborate on eight knowledge and skills required by a personnel involved in food product development.	4
34.	Compare two points of differences between tube feeding and intravenous feeding. And also give three each objectives of diet therapy and role of clinical nutritionist.	5
35.	During season sale, your brother wants to buy geyser on discounted price. Explain him four each responsibilities and rights of consumer in this context. Also tell him about two features of Consumer Protection Act. OR Your friend wants to pursue career in consumer related field . Guide him/her about five each skills and career opportunities of this field.	5
36.	Your sister wants to go in for a career of fashion designer. Explain her the five stages of fashion cycle.	5

MARKING SCHEME (2020-2021)

CLASS XII HOME SCIENCE(064)




SECTION A (OBJECTIVE TYPE QUESTIONS)		
S.No.	VALUE POINT	Marks
1.	d) Phytochemicals OR d) Oxalates	1
2.	d) Both b) and c)	
3.	c) Nicolas Appert	1
4.	a) Lobby Manager OR b) Desk control supervisor	1
5.	b) Indian Railways	1
6.	a) a - iv), b - i), c - ii), d - iii)	1
7.	a) Heating	1
8.	a) Executive chef	1
9.	Development Communication OR PSA (Public Service Announcement)	
10.	ergon' (work) and 'nomincs (natural laws)	1
11.	Shola craft from Odisha OR Warli painting from Maharashtra	$\frac{1}{2}+1/2=1$ OR $\frac{1}{2}+1/2=1$
12.	 <i>Your Assurance of Pure Silk</i>	1

13.	local group of women should get associated with SEWA as- 1. It achieve employment and self reliance for women workers. 2. Support in other related areas like income, food and social security. 3. Any other(any two)	1/2x2=1
14.	Two wage employment opportunities after training in ECCE are - 1. Teacher in Nursery schools 2. Caregiver in day care centres and creches 3. Team members for programmes for young children 4. Any other (any two) OR Two skills an early childhood professional needs to have are- 1. An interest in children and their development 2. Knowledge about the needs and capabilities of young children 3. Capacity and motivation for interacting with children 4. Any other (any two)	$\frac{1}{2}+1/2=1$ OR $\frac{1}{2}+1/2=1$
15.	b. Hidden Hunger	1
16.	a. inadequate	1
17.	b. Stunting	1
18.	d. Protein deficiency is called as marasmus	1
19.	b. Intensity	1
20.	a. Different in lightness and darkness OR a. Intermediate or Tertiary colour	1 OR 1

21.	c. Value OR c. Tint	1 OR 1						
SECTION C								
22.	<p>Four ways by which a teacher can create healthy environment in the class-</p> <ol style="list-style-type: none"> 1. Paying adequate attention to the individual student's needs 2. Building a positive work cimate 3. Motivating students 4. Being fair and treating all students equally 5. Any other (any four) <p style="text-align: center;">OR</p> <p>Four personal attributes which should be possessed by an entrepreneur are-</p> <ol style="list-style-type: none"> 1. Willingness to work hard 2. Knowledge and skills for planning and implementation 3. Having the courage to take calculated risks 4. Ability and preparedness to handle many tasks simultaneously 5. Any other (any four) 	<p>1/2x4=2</p> <p>OR</p> <p>1/2X4=2</p>						
23.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">STRATEGIES</th><th style="text-align: center;">ADVANTAGES</th><th style="text-align: center;">DISADVANTAGES</th></tr> </thead> <tbody> <tr> <td style="vertical-align: top;">Diet or food-based strategies</td><td style="vertical-align: top;"> <ol style="list-style-type: none"> 1. Highly cost effective 2. Wide coverage 3. Any other (any two) </td><td style="vertical-align: top;"> <ol style="list-style-type: none"> 1 Requires research 2. Does not lead to long-term dietary/behaviour changes 3. Any other (any two) </td></tr> </tbody> </table>	STRATEGIES	ADVANTAGES	DISADVANTAGES	Diet or food-based strategies	<ol style="list-style-type: none"> 1. Highly cost effective 2. Wide coverage 3. Any other (any two) 	<ol style="list-style-type: none"> 1 Requires research 2. Does not lead to long-term dietary/behaviour changes 3. Any other (any two) 	1+1=2
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24.	<p>Four stages of Guest Cycle-</p> <ol style="list-style-type: none"> 1. Pre-arrival stage - It include: quoting rates for a guest and reserving a room 2. Arrival Stage - The guest actually arrives and registers or checks-in. 3. Occupancy- This stage consists of providing various services as per the guest's requirements, ensuring security of the guest and coordination of various guest services. 4. Departure- The guest is ready to leave/move out or "check-out" of the accommodation. <p style="text-align: center;">OR</p> <p>Functions of Housekeeping Department are-</p> <ol style="list-style-type: none"> 1. Cleaning of public areas and guest-rooms. 2. Supply, upkeep of laundry and exchange of various linen 3. Internal flower arrangement and maintenance of external landscape or garden. 4. Coordination and communication with other departments such as front office, restaurants, engineering, accounts, etc., through control desk. 5. Pest control 6. Any other(any four) 	<p>1/2x4=2</p> <p>OR</p> <p>1/2X4=2</p>
25.	<p>ICT is a powerful tool of development communication and informing people as-</p> <ol style="list-style-type: none"> 1. This is an umbrella term that includes computer hardware and software, digital broadcast and telecommunication technologies. 2. Use of mobile phones has enabled and facilitated the expansion of markets, social business and public services. 3. Mobile phones have provided a wide range of economic services, banking and financial transactions, marketing and distribution, employment and public services. 4. ICT's are economically, socially and socially transformative. 5. Any other (Any four) 	1/2x4=2

26.	<p>Four primary requirements when preparing for a career in the field of care and maintenance of fabric.</p> <ol style="list-style-type: none"> 1. Knowledge of material in terms of fiber content, yarn and fabric production technique, Colour and finishes applied etc. 2. Knowledge of the processes involved. 3. Knowledge of the chemicals and other reagents used in the process and their effect on the fabrics. 4. Working knowledge of the machinery requirement and its functioning. 5 Any other (any four) 	$1/2 \times 4 = 2$
27.	<p>Children's homes are formed-by the Government for children from 3-18 years who are in state custody for various reasons. Need of three kinds of children's homes are-</p> <ol style="list-style-type: none"> 1. Observation Homes- children stay temporarily till the completion of an investigation to track down their parents and collect information on their family background. 2. Special Homes -juveniles (children under 18 years of age) found guilty in terms of violation of law, are placed in custodial care 3. Juvenile /Children's Homes- where children whose families are not traceable, or are unfit/ dead or simply unwilling to take the child back stay. <p>(Each one explained in 1-2 lines)</p>	$\frac{1}{2} \times 4 = 2$

28.	<p>Three ways to create "Rhythm" in the frock are-</p> <ol style="list-style-type: none"> 1. Repetition of embroidery, laces, buttons, piping, colour etc. at the neckline, sleeves and hemline of frock.  <ol style="list-style-type: none"> 2. Radiation where eyes move in an organized way from a central point e.g. gathers in waist, yoke or cuffs etc.  <ol style="list-style-type: none"> 3. Parallelism where elements lie parallel to each other e.g. tucks in a yoke or knife pleats in a skirt.  <ol style="list-style-type: none"> 4. Any other (any three) 	1+1+1=3
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30.	<p>a) Four factors need to be kept in mind before choosing the process of washing:</p> <ol style="list-style-type: none"> 1. Fiber contents 2. Type of yarn 3. Fabric construction on techniques 4. Finishes used 5. Any other (Any two) <p>b) Two types of circulation systems:</p> <ol style="list-style-type: none"> 1. Air of relatively low temperature is circulated high velocity: the air present in the room, enters a driver from under the panel, passes over the heat source and then through clothes and leaves through an exhaust and therefore the temperature and humidity of the room stays normal. 2. Air at high temperature is circulated slowly: In this, after the air enters the drier and passes over the heat source, it is drawn by a small fan through perforations at the top of the drier, then downwards through the clothes and out through the exhaust. Since the movement of the air in this drier is slow, the relative humidity of the exhausted air is high. <p style="text-align: center;">OR</p>	2+2=4
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	<p>In Hospitals:</p> <ol style="list-style-type: none"> 1. The hospital laundry takes care of hygiene, cleanliness and disinfection. 2. Many hospitals have started using disposables where there is a threat of infection, which are then destroyed by burning. 3. Most of the articles in hospitals are of cotton and dyed (in colours specific to the hospital and department) with dyes which have excellent wash-fastness. 4. The daily laundry thus emphasizes mainly on cleanliness of cotton materials. 5. Even the ironing and pressing may not be done to perfection. 6. Repair and mending and condemnation of unusable material may or may not form a part of the services required. 7. The quantum of work, especially for bed linen, is much larger for hospitals as compared to hotels. The larger hospitals may have to take care of 1,800-2,000 beds or even more. <p>In Hospitality sector:</p> <ol style="list-style-type: none"> 1. Aesthetics and final finish of the articles are the most important. 2. As compared to hospitals the articles here may be of different fiber contents. 3. Final finishing of laundered goods, i.e., starching, ironing pressing, correct and perfect folding, are emphasised. 4. They also have to care of guests' personal laundry when required. 5. The smaller hotels may have link ups with commercial laundries from outside. 6. The quantum of work, especially for bed linen, is much lesser in hotels. The big hotels may have up to 400-500 rooms. <p>(Any other point, Any four differences)</p>	<p>OR</p> <p>1X4=4</p>
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31.	<p>Food safety and quality can be ensured through -</p> <ol style="list-style-type: none"> 1. Good Manufacturing Practices (GMP) <ul style="list-style-type: none"> • ensures that manufacturers produce safe products / help consumers buy safe products. • remove contamination 2. Good Handling Practices indicate a comprehensive approach from the farm to the sector or consumer, <ul style="list-style-type: none"> • in order to identify possible sources of risk • Indicates what steps and procedures are taken to minimise contamination risk. 3. Hazard Analysis Critical Control Point (HACCP) <ol style="list-style-type: none"> 1. Identify a hazard (biological, chemical and physical) 2. Assessment of chances of occurrence of hazards during each step/stage in the food chain <p>(Any three points)</p> <p>Two importance of FSSA, 2006 are-</p> <ol style="list-style-type: none"> 1. To regulate manufacture, storage, distribution, sale and import of food 2. To ensure availability of safe and wholesome food for human consumption 3. Any other (Any two) 	3+1=4
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32.	<p>Four principles given by NCF (2005) to be kept in mind are-</p> <ol style="list-style-type: none"> 1. Play as the basis for learning 2. Art as the basis of education 3. Mix of formal and informal interactions 4. Use of local materials, arts and knowledge <p>(Any other, any four points)</p> <p>b) Four facilities must be included in the institution for children are-</p> <ol style="list-style-type: none"> 1. Recreational facilities /play material 2. Safety arrangements 3. Clean drinking water facilities 4. Medical facilities <p>Any other,(Any four)</p>	2+2=4
33.	<p>Eight knowledge and skills required by a personnel involved in food product development are-</p> <ol style="list-style-type: none"> 1. Knowledge of food preparation and cooking skills for large scale food production 2. Knowledge of product specifications and testing it. 3. Observing and measuring quality control as per specification. 4. Assessment by sensory methods (by testing and testing produced. 5. Industrial practices and manufacturing systems and their control. 6. Labelling of marketable product. 7. Packaging of marketable product. 8. Hazard Analysis Critical Control Point (HACCP) <p>(Any other, Any eight points)</p>	1/2x8=4

34.

TUBE FEEDING	INTRAVENOUS FEEDING
1. Nutritionally complete feeds are delivered through tubes.	1. Through a drip in a vein special solutions are given to support body function.
2. It is given in cases when the patient's gastrointestinal tract is functioning well	2. It is given when patient's gastro intestinal tract is not functioning properly

Objectives of diet therapy are-

- i. Formulation of the diet to meet the needs of the patient into consideration her of his food habits.
- ii. Modification of the existing diet to ameliorate the disease condition and to keep it under control.
- iii. Correction of nutritional deficiencies.
- iv Prevention of short-term and long-term complications in case of chronic diseases

Any other (Any three)

1. Provide advice and translate information into dietary guidelines.
2. Plan diets appropriately to meet the nutritional requirements at various stages of the life cycle.
3. Promote health and well-being of patients admitted to hospital or in outpatients clinics (OPD) as well as in institutional settings
4. Manage food services in a variety of institutional settings such as old age homes, schools, orphanages etc.
5. Any other (Any four)

2+1.5+1.5=5

35.	<p>Four responsibilities of consumer are -</p> <ol style="list-style-type: none"> 1. Survey the market before buying 2. Should read all information given on label, leaflet etc before purchasing 3. Should buy only what is needed 4. They should read and understand all terms and conditions, especially the fine print before signing any document. (LIC, credit card) 5. Buy goods with only genuine standard marks. 6. Should take bill after paying taxes and file. 7. Any other(Any four) <p>Four rights of consumer are-</p> <ol style="list-style-type: none"> 1 Right to Safety-To demand safe products and be protected against all the harmful products 2. Right to Choose-To choose from variety of goods 3. Right to Seek Redressal-To seek justice in case of cheating 4. Right to be Informed-To demand information regarding products 5. Any other (Any four) <p>Two features of Consumer Protection Act are-</p> <ol style="list-style-type: none"> 1. It includes both goods and services. 2. Nominal fees for filing before the courts 3. Timely redressal 4. Any other (Any two) <p style="text-align: center;">OR</p>	2+2+1=5
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	<p>Skills required for career in consumer field are-</p> <ol style="list-style-type: none"> 1. Knowledge about consumer protection mechanisms and redressal agencies 2. Good communication and interpersonal skills 3. Empathetic and Understanding attitude 4. Good listener 5. Creative in developing programmes (advertisements, talks, etc.) 6. Writing skills for developing educational material for consumer education 7. Willingness to help fellow consumers 8. Any other (Any five) <p>Career opportunities are-</p> <ol style="list-style-type: none"> 1. Work in government organizations like <ul style="list-style-type: none"> • (BIS) Bureau of Indian Standards, • Directorate of Marketing and Inspection, (Ag MARK) • Ministry of Consumer Affairs in managerial and technical position. 2. Work in voluntary consumer organizations (VOICE/CERC) for product testing to create consumer awareness and publishing of magazines. 3. Work in consumer division of corporate houses that deal with consumer complaints and suggestions. 4. Work with market research organization in areas of consumer behaviour or product reach, and consumer acceptance of new products, consumer feedback and suggestion 5. Work in National Consumer Helpline for consumer counselling 6. Any other (Any five) 	<p>OR</p> <p>2.5+2.5=5</p>
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36.	<p>Five stage of fashion cycle are-</p> <ol style="list-style-type: none"> 1. Introduction of a style : New styles are offered by the designers to the public. Design are created by changing the elements such as line, colour, shape, fabric and other details. 2. Increase in popularity: New fashion may begin to rise in popularity as it is purchases, worn and seen by many people. 3. Peak of popularity: When a fashion is at the height of its popularity, it may be in such demands that many manufactures copy it or produced adaptations of it different price levels. 4 Decline in popularity: Eventually so many copies are mass produced that fashion-conscious people tire of the style and begin to look for something new. 5. Rejection of style or Obsolescence: In the last phase of the fashion cycle, some consumers have already turned to new looks, thus beginning a new cycle. 	1×5=5
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SAMPLE QUESTION PAPER (2021-2022)

Term I

Home Science (064)

Class-XII

M.M. 35

Time: 90 Minutes

General Instructions

There are total 55 questions.

1. All questions carry equal marks.
2. Question paper is divided into three sections- A, B and C.
3. Section A has 25 multiple choice questions. Attempt any 20 questions.
4. Section B has 24 multiple choice questions. Attempt any 20 questions.
5. Section C has 6 MCQs based on a case study. Attempt any 5 questions.

S.No.	SECTION A (Attempt any 20 questions)
1.	Which is not amongst the four pillars of Ergonomics? a. Nutraceuticals b. Medical foods c. Antioxidants d. Phytochemicals
2.	Rahul ate a sandwich which appeared good and smelled pleasant. Within few hours he complained of severe stomachache, nausea and vomiting. This could be attributed to- a. Food adulteration b. Food intoxication c. Food infestation d. Food contamination
3.	Nitya owns a garment company and took risky decisions in her work every day. Nitya is an/ a--- a. Entrepreneur b. Wage employed person c. Labourer d. Unskilled worker
4.	In India, health care is provided at three levels. Which of the following is not correctly matched? a. Primary level- PHC b. Secondary level-CHC c. Tertiary level- CHC d. Tertiary level-AIIMS

12.	Which of the following is not the function of HACCP? a. Preventive approach to ensure food safety b. Enables only producers to utilise resources efficiently c. Assures consistently good quality products d. Detect hazards at any stage of processing or manufacturing of food
13.	After surgery of stomach your grandfather is unconscious, which mode of feeding would be preferred for him and why? a. Oral feeding and easy to chew b. Tube feeding and easy to digest c. Intravenous feeding and to get nourishment d. Nasogastric feeding and nutrition
14.	In which year the first SOS village was set up in India and who were the beneficiaries? a. 1954 and disabled children b. 1964 and abandoned children c. 1965 and special need children d. 1963 and juvenile delinquents
15.	Sun drying is the oldest method of food preservation. Which principle of food preservation is involved in it? a. Lowering of temperature b. Reduction of pH c. Removal of water d. Controlling the availability of oxygen
16.	Which of the following is not a feature of Good Manufacturing Practices (GMP)? a. Minimize false labeling b. Consumer protection c. Eliminate contamination d. Mislead consumer

17.	<p>She is the chairperson and managing director of Biocon India Ltd. She started her career as a trainee brewer in Carlson and United Beverages. In 2005, she was honoured with Padma Bhushan. Identify the personality.</p> <p>a. Ms. Kiran Mazumdar Shaw b. Ms. Kusum Mazumdar Shaw c. Ms Kiran Mazumdar Shah d. Ms Kalyani Mazumdar Shaw</p>
18.	<p>Your sister has completed her diploma in clinical nutrition and dietetics. Choose from the following options which are available to her to start her career?</p> <p>a. School counsellor b. Research and development and Nutraceuticals c. E.C.C.E. d. In Agriculture Industry</p>
19.	<p>Which of the following act as biological catalysts to accelerate chemical reactions in food?</p> <p>a. Pesticides b. Exposure to light c. Enzymes d. Moisture</p>
20.	<p>Name the agency which set up guidelines for adoption to safeguard the Welfare and Rights of children.</p> <p>a. NARA b. CARA c. CAPA d. RACA</p>
21.	<p>Which of the following is not an objective of diet therapy?</p> <p>a. Modification of existing diet b. Knowledge of traditional cuisine c. Prevention of complications d. Correction of nutritional deficiency</p>
22.	<p>At which age the child can distinguish between the stranger and familiar people?</p> <p>a. 6-8 months b. 8-12 months c. 9-10 months d. 10-12 months</p>

23.	In how many minutes can salmonella bacteria double their number? a. Every 10 minutes b. Every 20 minutes c. Every 40 minutes d. Every 5 minutes
24.	Mention the years In which National Policy for older person and National Youth Policy were adopted a. Year 1999 and 2003 b. Year 1998 and 2003 c. Year 1999 and 2004 d. Year 1998 and 2004
25.	Identify the components present in natural foods or food products manufactured where in specific ingredients have been included to confer health benefits. a. Nutraceuticals b. Medical foods c. Antioxidants d. Phytochemicals
	SECTION B (Attempt any 20 questions)
26.	Followings are the popular traditional handicrafts of India Which option is incorrect? a. Coconut craft-Kerala b. Warli Painting-Maharashtra c. Shola Craft-Karnataka d. Bamboo craft -Assam
27.	Anita has just completed her schooling She wants to be an early childhood professional Suggest her a suitable course from the following which will help her in fulfilling her dream. a. Diploma in dietetics b. Diploma in ECCE c. PG Diploma in ECCE d. Diploma in HR
28.	Mr. Ramesh found a four year old child near the Railway station and handed over him to local Police Suggest the suitable option for the police for the time being, where the child should be sent. a. Juvenile home b. Special home c. Observation home d. SOS Village

29.	Match the following
	A Manufactured food i. Sugar from sugarcane
	B Derivative food ii. Bread
	C Formulated food iii. Enzymes used in food industry
	D. Synthetic food iv. Papad
	Choose the correct option.
	a. Aiv, Bi, Cii, Diii
	b. Aii, Bi, Civ, Diii
	c. Aiv, Bi, Ciii, Dii
	d. Aiii, Bii, Civ, Di
30.	Mr. Anil is 80 years old, who is living in old age home and underwent heart surgery last week and he needs continuous nursing care. Which of the programme is suitable for him?
	a. Moblie care unit b. Respite homes
	c. Multi-units d. Day care
31.	Which type of diets should be prescribed by the dietician to your grandfather who is suffering from kidney and chewing problem respectively?
	a. Low protein diet and mechanical soft diet
	b. High protein diet and mechanical soft diet
	c. Low fibre diet and liquid diet
	d. High fibre diet and regular diet
32.	Which of the following is not the function of FSSAI?
	a. To establish international standards to protect the health of consumers
	b. Promote general awareness about food safety and food standards.
	c. To promote the development of standardization and related activities in the world

	<p>d. Provide training programmes for persons who are involved or intend to get involved in food businesses</p> <p>Choose the correct option</p> <p>a. i and ii b. ii and iv</p> <p>c. iii and iv d. i and iii</p>
33.	<p>"The National Service Volunteer Scheme" provides opportunities to students to involve themselves, on a whole-time basis for a short period of one or two years, in programmes of national development</p> <p>Following are the programme undertaken by them-</p> <p>i. Organising jamborees</p> <p>ii. Vocational training</p> <p>iii. Adult Education</p> <p>iv. Coastal sailing</p> <p>Choose the correct option.</p> <p>a. i and ii b. ii and iv</p> <p>c. iii and iv d. i and iv</p>
34.	<p>Sheena wants to work in famous play school of the town. What qualities she must possess?</p> <p>i. An interest in child</p> <p>ii. Health status of child</p> <p>iii. Skills for creative activities</p> <p>iv. Cooking skills</p> <p>Choose the correct options.</p> <p>a. i and ii b. ii and iii</p> <p>c. ii and iv d. i and iii</p>
35.	<p>Ramesh wants to start new industry of cheese manufacturing. What knowledge and skills he requires for this?</p> <p>i. Assessment by sensory methods.</p> <p>ii. Labelling and packaging of marketable product.</p> <p>iii. Seasonal availability of food stuff.</p> <p>iv. Food handling skills</p> <p>Choose the correct option.</p> <p>a. i and iv b. i and iv</p> <p>c. iii and iv d. ii and iii</p>

36.	<p>The elderly are vulnerable group due to various reasons Few reasons are-</p> <ul style="list-style-type: none"> i. Decreased defence mechanism ii. Increased financial resources iii. Improved physiological reserves iv. Nuclear family system <p>Choose the correct option</p> <p>a. i and ii b. ii and iii c. i and iv d. ii and iv</p>
37.	<p>After graduation Reena got the job in MNC but she is finding it difficult to cope with her working life. Here are few tips to improve work life</p> <ul style="list-style-type: none"> i. Be empathetic ii. Thinking in monotonous way iii. Encourage partnership iv. Be rigid <p>Choose the correct option.</p> <p>a. i and ii b. ii and iv c. i and iii d. ii and iii</p>
38.	<p>Mrs. Verma wants to open up pre-school in her locality, Which guiding principles of ECCE should be considered by her?</p> <ul style="list-style-type: none"> a. Blend of textual and cultural resources b. Use of local materials c. Focus only on nutritious meals d. Promoting difficult task <p>Choose the correct option</p> <p>a. i and ii b. ii and iv c. i and iv d. ii and iii</p>
39.	<p>When is food said to be spoilt?</p> <ul style="list-style-type: none"> i. Poor presentation ii. Change in consistency iii. Change in texture and flavour iv. Unhealthy meal <p>Choose the correct option.</p> <p>a. i and ii b. ii and iii c. ii and iv d. ii and iv</p>

40.	<p>Given below are two statements labeled as Assertion (A) and reason (R)</p> <p>Assertion(A)- A programme or an institution for children will be successful if the community feels a sense of involvement and ownership with it.</p> <p>Reason(R)- While planning for such a programme people of management must be involved right from start.</p> <p>Select the most appropriate answer from the options given below.</p> <p>a. Both A and R are true and R is the correct explanation b. Both A and R are true but R is not the correct explanation. c. A is true R is false. d. A is false but R is true</p>
41.	<p>Given below are two statements labeled as Assertion (A) and reason (R)</p> <p>Assertion(A)- Milk and curd spoil quickly within one or two days.</p> <p>Reason(R)- They are perishable foods</p> <p>Select the most appropriate answer from the options given below.</p> <p>a. Both A and R are true and R is the correct explanation b. Both A and R are true but R is not the correct explanation. c. A is true R is false. d. A is false but R is true</p>
42.	<p>Given below are two statements labeled as Assertion (A) and reason (R)</p> <p>Assertion(A)- Nutritional status and support, prior to and after illness, play an important role in prognosis, recovery and even duration of hospitalisation.</p> <p>Reason(R)- Nutritional care has gained importance worldwide, more so in recent times</p> <p>Select the most appropriate answer from the options given below.</p> <p>a. Both A and R are true and R is the correct explanation b. Both A and R are true but R is not the correct explanation c. A is true R is false d. A is false but R is true</p>

43.	<p>Given below are two statements labeled as Assertion (A) and reason (R)</p> <p>Assertion(A)- Food quality refers to the texture of meal</p> <p>Reason(R)- The WTO Agreement covers goods, services and intellectual property.</p> <p>Select the most appropriate answer from the options given below.</p> <p>a. Both A and R are true and R is the correct explanation. b. Both A and R are true but R is not the correct explanation. c. A is true R is false. d. A is false but R is true</p>
44.	<p>Given below are two statements labeled as Assertion (A) and reason (R)</p> <p>Assertion (A)- Food fortification is done by adding the nutrient that is lacking in the food stuffs to ensure that minimum dietary requirements are met</p> <p>Reason(R)- India has progressed from an agro-deficit to an agro-surplus country creating need for storage and processing of agricultural and horticultural produce.</p> <p>Select the most appropriate answer from the options given below.</p> <p>a. Both A and R are true and R is the correct explanation b. Both A and R are true but R is not the correct explanation. c. A is true R is false. d. A is false but R is true</p>
45.	<p>Given below are two statements labeled as Assertion (A) and reason (R)</p> <p>Assertion (A)- Meaningful work is useful to society or to others, is done responsibly and is enjoyable to the worker.</p> <p>Reason(R)- It is important to choose something to sustain the individual's enthusiasm to carry on his/her work.</p> <p>Select the most appropriate answer from the options given below.</p> <p>a. Both A and R are true and R is the correct explanation. b. Both A and R are true but R is not the correct explanation. c. A is true R is false. d. A is false but R is</p>

46.	<p>Given below are two statements labeled as Assertion (A) and reason (R)</p> <p>Assertion(A)- A medical nutrition therapist is a health professional that diagnoses and treats the dietary and nutritional problems of a person.</p> <p>Reason(R)- Medical nutrition therapist plans diet at gym, hostels, aircraft, five star hotels, etc</p> <p>Select the most appropriate answer from the options given below.</p> <p>a. Both A and R are true and R is the correct explanation b. b. Both A and R are true but R is not the correct explanation. c. A is true R is false d. A is false but R is true.</p>
47.	<p>Given below are two statements labeled as Assertion (A) and reason (R)</p> <p>Assertion(A) - A National Plan of Action for women was taken up by the department of social welfare</p> <p>Reason(R)- It was set to implement the equal remuneration act.</p> <p>Select the most appropriate answer from the options given below.</p> <p>a. Both A and R are true and R is the correct explanation b. Both A and R are true but R is not the correct explanation c. A is true R is false d. A is false but R is true.</p>
48.	<p>Given below are two statements labeled as Assertion (A) and reason (R)</p> <p>Assertion(A)- Three-year-old children are curious to learn more.</p> <p>Reason(R)- Satisfying a child's curiosity by providing an optimal learning environment is an essential consideration at this age.</p> <p>Select the most appropriate answer from the options given below.</p> <p>a. Both A and R are true and R is the correct explanation b. Both A and R are true but R is not the correct explanation. c. A is true R is false. d. A is false but R is true.</p>

49.	<p>Given below are two statements labeled as Assertion (A) and reason (R)</p> <p>Assertion(A)- Nutrient based approach is very effective strategy to overcome nutritional deficiencies.</p> <p>Reason(R)- It has wide coverage and is inexpensive</p> <p>Select the most appropriate answer from the options given below.</p>
	<p>a. Both A and are true and R is the correct explanation. b. Both A and R are true but R is not the correct explanation. c. A is true R is false. d. A is false but R is true</p>
	<p style="text-align: center;">SECTION C (Attempt any 5 questions)</p>
50.	<p>Read the following passage and answer Q No. 50 to 55</p> <p>In any society nutritional problems are not just linked to food but to a variety of interacting/interrelated factors at various levels. While poverty is often the underlying cause, the situation becomes worse when a substantial proportion of families do not have access to basic amenities. Rural households have less access to toilets. Poor sanitation results in loss of work days and further economic loss. Further, considerable proportion of the population does not have safe drinking water.</p> <p>The causes of malnutrition identify several levels of causes immediate, underlying and basic. Which of the following is not one of the underlying causes?</p> <p>a. Insufficient rainfall for agriculture b. Inadequate access to food c. Inadequate care for mothers and children d. Insufficient health services and unhealthy environment</p>

51.	<p>Following are nutrition programmes and their examples operating in India. Select the incorrect option.</p> <p>a. Food Supplementation Programme- Mid day meal</p> <p>b. Food Security Programme - Public distribution system</p> <p>c. ICDS-Annapurna Scheme</p> <p>d. Nutrient Deficiency Control Programme- National Prophylaxis Programme</p>
52.	<p>What is the mission of Public Health Nutrition?</p> <p>a. To prevent overnutrition and to maintain optimal nutritional status of individual and family</p> <p>b. To prevent undernutrition and to maintain optimal nutritional status of individual's family</p> <p>c. To prevent undernutrition and overnutrition problem of society</p> <p>d. To prevent both undernutrition and overnutrition and to maintain optimal nutritional status of the population.</p>
53.	<p>Since past 15 days, Seema who is 30-year-old is feeling lethargic, breathlessness and fatigue on slight exertion. Identify the deficiency disease she might be suffering from.</p> <p>a. IDA b. IDD</p> <p>c. VAD d. Osteoporosis</p>
54.	<p>To tackle with nutritional problems Poshan Abhiyaan was started. Following interventions were initiated-</p> <p>i. Food fortification</p> <p>ii. Ensuring food security</p> <p>iii. Poverty alleviation</p> <p>iv. Production of low cost nutritious food</p> <p>Which of these are direct short term interventions to tackle nutritional problems?</p> <p>a. i and ii b. ii and iii</p> <p>c. i and iv d. ii and iv</p>

55.	<p>Given below are two statements labeled as Assertion (A) and reason (R)</p> <p>Assertion(A)- Deficiency of iodine results in insufficient amount of thyroid hormone which is synthesized by the thyroid gland.</p> <p>Reason(R)- IDD is an ecological phenomenon, largely due to deficiency of iodine in the soil.</p> <p>Select the most appropriate answer from the options given below.</p> <p>a. Both A and R are true and R is the correct explanation</p> <p>b. Both A and R are true but R is not the correct explanation.</p> <p>c. A is true R is false.</p> <p>d. A is false but R is true</p>
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MARKING SCHEME (2021-2022)

Term I

Home Science (064)

Class-XII

M.M. 35

Time: 90 Minutes

Q.No.	SECTION A
1	a. Biometrics
2	b. Food intoxication
3	a. Entrepreneur
4	c. Tertiary level-CHC
5	d. Diet survey
6	a. Anganwadis
7	c. Ministry of Health and Family Welfare
8	b. 5° C-60°C
9	a. Piaget
10	c. Creche
11	c. Food Processing
12	b. Enables only producers to utilise resources efficiently
13	c. Intravenous feeding and to get nourishment
14	b. 1964 and abandoned children
15	c. Removal of water
16	d. Mislead consumer
17	a. Ms. Kiran Mazumdar Shaw
18	b. Research and development and Nutraceuticals
19	c. Enzymes
20	b. CARA
21	b. Knowledge of traditional cuisine
22	b. 8-12 month
23	b. Every 20 minutes
24	a. Year 1999 and 2003
25	a. Nutraceuticals

	SECTION B
26.	c. Shola Craft- Karnataka
27.	b. Diploma in ECCE
28.	c. Observation home
29.	a. Aiv, Bi, Cii, Diii
30.	b. Respite homes
31.	a. Low protein diet and mechanical soft diet
32.	b. ii and iv
33.	d. i and iv
34.	d. i and iii
35.	a. i and ii
36.	c. i and iv
37.	c. i and iii
38.	a. i and ii
39.	b. ii and iii
40.	c. A is true R is false.
41.	a. Both A and R are true and R is the correct explanation.
42.	b. Both A and R are true and R is not the correct explanation.
43.	d. A is false but R is true
44.	b. Both A and R are true and R is not the correct explanation.
45.	b. Both A and R are true and R is not the correct explanation.
46.	d. A is true R is false.
47.	a. Both A and R are true and R is the correct explanation.
48.	b. Both A and R are true and but R is not the correct explanation.
49.	c. A is true R is false.
	SECTION C
50.	a. Insufficient rainfall for agriculture
51.	d. ICDS- Annapurna Scheme
52.	d. To prevent both undernutrition and overnutrition and to maintain optimal nutritional status of the population.
53.	a. IDA
54.	c. i and iv
55.	b. Both A and R are true but R is not the correct explanation.

NOTE
