### WEEK WISE SYLLABUS - 2013-2014

**CLASS–XI**

**SUBJECT - BIOLOGY**

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<tr>
<td>1-07-2013-</td>
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<tr>
<td>6-07-2013</td>
<td>Chapter-1 Living world:- Characteristics of Living organisms, Diversity in the living world, Need of classification, Binomial nomenclature, systematics, Taxonomic categories Taxonomical Aids Practical – study parts of a compound microscope</td>
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<tr>
<td>8-07-2013</td>
<td>Chapter-2: Biological Classification:- Five Kingdoms Classification-Monera, Protista, Fungi, Plantae, &amp; Animalia, Characteristic features of kingdom Monera &amp; Protista with examples. Practical – Study of Bacteria &amp; Amoeba through permanent slides.</td>
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<td>15-07-2013</td>
<td>Characteristics of kingdom Fungi, Division of kingdom Fungi into classes, salient features of each class with example, Characteristics of kingdom plantae &amp; Animalia and lichens, viruses and viroids, Five kingdom classification, three domains of life. Practical: Study of specimens of Rhizopus, Mushroom, Yeast and lichens. YUVA Session 11.2-Aamir ki Basanti Burfi</td>
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<td>22-07-2013</td>
<td>Chapter-3 Kingdom Plantae, Classification of kingdom plantae into major divisions Algae, Bryophytes, Pteridophytes, Gymnosperms &amp; Angiosperms. Characteristics of each division and examples. Practical: Identification &amp; comment on specimens oscillatoria, Spirogyra, Liverwort, moss, Fern, Pine, one monocotyledonous &amp; one dicotyledonous plant. YUVA Session: 3.2- Choice not chance determines destiny</td>
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| 12-08-2013 | **YUVA Session 11.7—I like Home cooked food!**  
Chapter- 5 Morphology of flowering plants:- Morphology of different parts of flowering plants – roots, stem, leaf, flower, fruit and seeds. Types of inflorescence, arrangements of leaf. **Practical** – Study of any three locally available common flowering plants from Solanaceae, Fabaceae & Liliaceae including dissection and display of floral parts. |
<p>| 17-08-2013 |                                                                                                                                          |
| 19-08-2013 | Chapter-6 Anatomy of flowering plants:- Plants tissue – Meristematic, permanent Anatomy of Dicotyledonous and monocotyledonous roots and stem. Dorsiventral leaf and isobilateral leaf, secondary growth <strong>Practical</strong>:- Preparation of T.S of Dicot and Monocot roots &amp; stems |
| 24-08-2013 |                                                                                                                                          |
| 31-08-2013 |                                                                                                                                          |
| 2-09-2013  | Morphology, anatomy &amp; functions of different systems of an insect cockroach- digestive, circulatory, respiratory, nervous &amp; reproductive <strong>Cell structure &amp; function</strong>:-Cell theory, prokaryotic &amp; eukaryotic cells. <strong>Practical</strong>: – study of external morphology of cockroach through specimen/model. |
| 7-09-2013  |                                                                                                                                          |
| 9-09-2013  | <strong>REVISION FOR SA-1</strong>                                                                                                                   |
| 13-09-2013 |                                                                                                                                          |
| 11-09-2013 | <strong>C.C.E.P.–1</strong>                                                                                                                          |
| 16-09-2013 | <strong>SA-1 EXAM</strong>                                                                                                                           |
| 26-09-2013 |                                                                                                                                          |
| 27-09-2013 | <strong>DISCUSS SA-1 PAPER YUVA</strong>                                                                                                             |
| 28-09-2013 | <strong>Session 11.10—Respect and care</strong>                                                                                                     |
| 30-09-2013 | Plant &amp; animal cell, cell envelope, Cell membrane, Cell Wall, Cell Organelles Structure &amp; function, endomembrane System, Endoplasmic reticulum, Golgi bodies, Lysosomes, Vacuoles, |
| 5-10-2013  |                                                                                                                                          |</p>
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<td>08-10-2013</td>
<td>Autumn Break</td>
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<td>11-10-2013</td>
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<td>14-10-2013</td>
<td>Chapter -9 : Biomolecules : Chemical constituents of living cells.</td>
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<td>19-10-2013</td>
<td>Biomolecules, primary &amp; secondary molecules, structure &amp; function of proteins, carbohydrates, lipids, nucleic acid, enzymes – types, properties &amp; enzyme action, co-factors Practical: – Test for the presence of sugar, starch, proteins &amp; fats, to detect these in plants. YUVA Session No. 11.8- Hearty Kaathi Rolls!</td>
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<td>21-10-2013</td>
<td>Chapter -10 : Cell cycle &amp; Cell division Different phases of mitosis &amp; meiosis, cell division, significance, of mitosis &amp; meiosis Practical: – Study of mitosis in onion root tip cells from permanent slides. YUVA Session 11.3-How can I be Assertive!</td>
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<td>26-10-2013</td>
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<td>1-11-2013</td>
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<td>8-11-2013</td>
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<td>11-11-2013</td>
<td>Nitrogen cycle, biological nitrogen fixation, nodule formation, Fate of ammonia. Chapter -13 : Photosynthesis in higher plants: Photosynthesis as a mean of autotrophic nutrition, site of photosynthesis, pigments involved in photosynthesis, (elementary idea), photochemical &amp; biosynthetic phase of photosynthesis, cyclic &amp; non-cyclic photophosphorylation, chemi-osmotic</td>
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### Contents

**Chapter 14: Respiration in Plants**
- Exchange of gases, cellular respiration, glycolysis, fermentation (anaerobic), TCA cycle & electron transport system (aerobic), energy relation – number of ATP molecules generated, amphibolic pathway, respiratory quotient.
- **Practical:**
  - Study of imbibition in seeds/raisin.

**Chapter 15: Plant Growth and Development**
- Seed germination, phases of plant growth & plant growth rate, conditions of growth, differentiation, dedifferentiation & redifferentiation, sequence of developmental processes in a plant cell, growth regulators – auxin, gibberellin, cytokinine, ethylene, ABA, seed dormancy, vernalisation, photoperiodism.
- **Practical:**
  - Observation & comments on the experiments on the experimental set up for:
    - Anaerobic respiration
    - Phototropism

**Chapter 16: Digestion & Absorption**
- Alimentary canal & digestive glands, role of digestive enzymes, & gastrointestinal hormones, peristalsis, digestion, absorption & assimilation of proteins, carbohydrates & fats, caloric values of proteins, carbohydrates & fats, egestion, nutritional & digestive disorders – PEM, indigestion, constipation, vomiting, jaundice, diarrhea, deficiency diseases.
- **Practical:**
  - To study the rate of respiration in flower buds/leaf tissue & germinating seeds.

**Chapter 17: Breathing & Exchange of Gases**
- Respiratory organs in animals (recall only).
- Respiratory system in humans.
- **Practical:**
  - Study of imbibition in seeds/raisin.
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<td>16-12-2013</td>
<td><strong>Chapter -18 : Body fluids &amp; circulation:</strong> Composition of blood, blood groups, coagulation of blood, composition of lymph &amp; its function, Human circulatory system structure of human heart, blood vessels, cardiac cycle, cardiac output, E.C.G. <strong>Practical:</strong> (Revision) Preparation &amp; study of T.S. of dicot &amp; monocot roots &amp; stems (primary)</td>
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<td>2-12-2013</td>
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<td>23-12-2013</td>
<td>Double circulation, regulation of cardiac activity, disorder of circulatory system –hypertension, coronary artery disease, anginapectoris, heart failure <strong>Practical:</strong> Observation and comments on the experimental set up for showing.1)Apical bud removal 2)Suction due to transpiration</td>
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<td>25-12-2013</td>
<td>Winter Break</td>
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<td>16-01-2014</td>
<td><strong>Chapter -19 : Excretory products &amp; their elimination:</strong> Modes of Excretion, Human excretory system, structure &amp; function, Urine Formation, regulation of kidney function, ADH &amp; diabetes-insipedus, role of other organs in excretion-lungs, liver &amp; skin. Disorders of excretory system, uremia, renal failure, Renal calculi, nephritis, dialysis &amp; artificial kidney. <strong>Practical:</strong> To detect the presence of urea in urine</td>
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<td>20-01-2014</td>
<td><strong>Chapter -20 : Locomotion and movement:</strong> Types of movement –Ciliary, flagellar, Muscular, skeletal muscle &amp; muscle contraction, skeletal system &amp; it functions. Type of joints, Disorder of Muscular &amp; Skeletal System – Myasthenia gravis, Tetany, Muscular dystrophy, Arthritis, osteoporosis, gout. <strong>Practical:</strong> To detect the presence of albumin in urine, To detect the presence of bile salt in urine.</td>
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<td>25-01-2014</td>
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<td>27-01-2014</td>
<td><strong>Chapter -21: Neural control &amp; coordination:</strong> Neuron &amp; nerves, nervous system in humans – CNS, PNS &amp; Visceral Nervous system, sense organs, chemical senses touch &amp; smell. <strong>Practical:</strong> Study of human skeleton &amp; different types of Joints.</td>
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<td>31-01-2014</td>
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<tr>
<td>10-02-2014-15-02-2014</td>
<td>Revision of 1\textsuperscript{st} term syllabus</td>
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<td>17-02-2014-22-02-2014</td>
<td>Revision of 2\textsuperscript{nd} term syllabus &amp; practical's</td>
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<td>24 Onwards</td>
<td>Revision &amp; discussion on previous Year papers.</td>
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