**Lesson Plan**

**Name Incharge Teacher: –** Dr. SONIA BATRA

**Subject : -** ZOOLOGY Theory

**Lesson Plan :** - 17 Weeks (16thJuly- 5th November 2018)

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| **Week** | **Date** | **Class B.Sc.-I (Paper I)** | **Class B.Sc-II**  **(Paper II)** | **Class B.Sc-III**  **(PaperI)** |
| 1 | 16.07.2018 | Introduction to Invertebrates | Introduction to Biochemistry |  |
| 17.07.2018 | Introduction to Phylum Protozoa  Protozoa |  |  |
| 18.07.2018 | Classification of Protozoa up to Order level |  |  |
| 19.07.2018 |  | Carbohydrates and its classification | Introduction to Ecology |
| 20.07.2018 |  | Structure, functions and  General properties of  Monosaccharides | Definition , significance  of ecology |
| 21.07.2018 |  |  | Concept of habitat  and ecological niche |
| 22.07.2018 | Sunday | | |
| 2 | 23.07.2018 | Classification of Protozoa up to Order level | Structure, functions and  General properties of  Disaccharides |  |
| 24.07.2018 | Biodiversity and Economic Importance of Protozoa |  |  |
| 25.07.2018 | Life cycle of Plasmodium |  |  |
| 26.07.2018 |  | Structure, functions and  General properties of  Polysaccharides | Effects of light on  environment |
| 27.07.2018 |  | Structure, functions and  General properties of  Polysaccharides | Effects of temperature  on environment |
| 28.07.2018 |  |  | Effects of humidity and topography on  environment |
| 29.07.2018 | Sunday | | |
| 3 | 30.07.2018 | Life cycle of Plasmodium | Class Test |  |
| 31.07.2018 | |  | | --- | | **Shaheed Udham Singh's Martyrdom Day** | | | |
| 1.08.2018 | Parasitic Protozoan viz life cycle of different species of Entamoeba |  |  |
| 2.08.2018 |  | Lipids and its clasiififation | Effects of edaphic  Factors on  environment |
| 3.08.2018 |  | Structure, functions and general properties of lipids | Effects of edaphic  factors on  environment |
| 4.08.2018 |  |  | Effect of Biotic factors  on environment |
| 5.08.2018 | Sunday | | |

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| 4 | 6.08.2018 | Parasitic Protozoan viz life cycle of different species of Entamoeba | Structure, functions and general properties of lipids | |  |
| 7.08.2018 | Revision | |  |  |
|  | 8.08.2018 | Life cycle of Trypanosoma | |  |  |
| 9.08.2018 |  | | Revision | Revision |
|  | 10.08.2018 |  | | Introduction to Proteins | Concept, components,  and functions of  ecosystem |
| 11.08.2018 |  | |  | Energy flow, Food chain |
| 12.08.2018 | Sunday | | | |
| 5 | 13.08.2018 | Life cycle of Leishmania and Giardia | | Classification of Proteins |  |
| 14.08.2018 | Class Test | |  |  |
| 15.08.2018 | Independence Day   |  | | --- | | **Independence Day** |  |  | | --- | | **Independence Day** | | | | |
| 16.08.2018 |  | | Structure of Proteins | Food Web, Trophic  structure |
| 17.08.2018 |  | | Functions of Proteins | Ecological pyramids,  Productivity |
| 18.08.2018 |  | |  | Introduction to major  Ecosystem of the  world |
| 19.08.2018 | Sunday | | | |
| 6 | 20.08.2018 | Introduction to Phylum Porifera | | Class Discussion |  |
| 21.08.2018 | Classification of Porifera | |  |  |
| 22.08.2018 | **Id-Ul-Zuha (Bakrid)**   |  | | --- | |  | | | | |
| 23.08.2018 |  | | Introduction and nomenclature of Enzymes | Introduction to major  Ecosystem of the  world |
| 24.08.2018 |  | | Classification of Enzymes | Introduction to major  Ecosystem of the  world |
| 25.08.2018 |  | |  | Class Test |
| 26.08.2018 | Sunday | | | |
| 7 | 27.08.2018 | Biodiversity in Sponges | | Mechanism of Enzyme action |  |
| 28.08.2018 | Economic importance of Sponges and type study of Scypha | |  |  |

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|  | 29.08.2018 | Type study of Scypha |  |  |
| 30.08.2018 |  | Michaelis-Menton  Equation | Concept of Biosphere |
| 31.08.2018 |  | Inhibition of Enzymes | Introduction to  Biogeochemical cycle,  Carbon cycle |
| 1.09.2018 |  |  | Nitrogen cycle, Oxygen  Cycle, Water cycle |
| 2.09.2018 | Sunday | | |
| 8 | 3.09.2018 | Janamashatmi  **Janamashatmi** | | |
| 4.09.2018 | Type study of Scypha |  |  |
| 5.09.2018 | Canal system in Sponges |  |  |
| 6.09.2018 |  | Regulation of Enzyme activity | Phosphorus cycle,  Sulphur cycle |
| 7.09.2018 |  | Assignment | Characteristics of  Population |
| 8.09.2018 |  |  | Characteristics of  Population |
| 9.09..2018 | Sunday | | |
| 9 | 10.09.2018 | Spicules in Sponges | Transport through Biomembranes |  |
| 11.09.2018 | Class Test |  |  |
| 12.09.2018 | Introduction to Cell Biology |  |  |
| 13..09.2018 |  | Buffers | Population trends in  India and World |
| 14.09.2018 |  | Class Test | Regulation of  Population |
| 15.09.2018 |  |  | Introduction to  Biodiversity |
| 16.09.2018 | Sunday | | |
| 10 | 17.09.2018 | Plasma membrane | Introduction to Nutritional components  viz Carbohydrates |  |
| 18.09.2018 | Transport across membrane |  |  |
| 19.09.2018 | Assignment |  |  |
| 20.09.2018 |  | Fats, Proteins | Types of Biodiversity |

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|  | 21.09.2018 |  | Vitamins and Minerals | | Uses, causes of extinction of biodiversity |
| 22.09.2018 |  |  | | Conservation of  biodiversity |
| 23.09.2018 | Sunday | | | |
| 11 | 24.09.2018 | Structure of Endoplasmic reticulum | Types of nutrition and feeding | |  |
| 25.09.2018 | Functions of Endoplasmic reticulum |  | |  |
| 26.09.2018 | Structure of Golgi Complex |  | |  |
| 27.09.2018 |  | Digestion of Carbohydrates ,Lipids | | Natural resources and their conservation |
| 28.09.2018 |  | Digestion of Proteins and Nucleic acids | | Natural resources and their conservation |
|  | 29..09.2018 |  |  | | Assignment |
| 30.09.2018 | Sunday | | | |
| 12 | 1.10.2018 | Functions of Golgi Complex | Symbiotic Digestion | |  |
| 2.10.2018 | **Mahatama Gandhi Jayanti** | **Mahatama Gandhi Jayanti** | | |
| 3.10.2018 | Ribosomes |  | |  |
| 4.10.2018 |  | Absorption of nutrients and assimilation | | Migration in Fishes |
| 5.10.2018 |  | Control of Enzyme  secretion | | Migration in Birds |
| 6.10.2018 |  |  | | Revision |
| 07.10.2018 | Sunday | | | |
| 13 | 08.10.2018 | Sessional Test | Sessional Test | |  |
| 09.10.2018 | Lysosomes |  | |  |
| 10.10.2018 | Maharaja Agrasen Jayanti  Maharaja Agrasen Jayanti | | | |
| 11.10.2018 |  | Types of muscles and  Ultra structure of  Skeletal muscles | Parental care in animals | |
| 12.10.2018 |  | Biochemical and physical  Events during muscle  contraction | Sessional Test | |
| 13.10.2018 |  |  | Introdction to population interaction | |
| 14.10.2018 | Sunday | | | |

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| 14 | 15.10.2018 | Structure of Mitochondria | Single muscle twitch,  Tetanus, Muscle  fatigue |  |
| 16.10.2018 | Functions of Mitochondria |  |  |
| 17.10.2018 | Power Point Presentations |  |  |
| 18.10.2018 | Dushhera | | |
| 19.10.2018 |  | Tone ,Oxygen debt,  Cori cycle, Single unit smooth muscle and their physical and functional properties | Competition, Predation |
| 20.10.2018 |  |  | Parasitism, Commensalism,  Mutualism |
| 21.10.2018 | Sunday | | |
| 15 | 22.10.2018 | Microtubules | Power Point Presentations |  |
| 23.10.2018 | Microfilaments |  |  |
| 24.10.2018 | Maharishi Valmiki's Birthday | | |
| 25.10.2018 |  | Structure and classification of bones | Revision |
| 26.10.2018 |  | Bone growth and resorption | Air Pollution and its management strategies |
| 27.10.2018 |  |  | Water Pollution and its management strategies |
| 28.10.2018 | Sunday | | |
| 16 | 29.10.2018 | Centriole | Effect of aging on skeletal system |  |
| 30.10.2018 | Basal Body |  |  |
| 31.10.2018 | Cilia and Flagella |  |  |
| 1.11.2018 | **Haryana Day.** | | |
| 2.11.2018 |  | Bone disorders | Soil Pollution and its management strategies |
| 3.11.2018 |  |  | Revision |
| 4.11.2018 | Sunday | | |
| 17 | 5.11.2018 | Revision | Revision |  |

**Lesson Plan**

**Name Teacher Incharge: –** Dr. SONIA BATRA

**Subject : -** Zoology Practicals

**Lesson Plan :** - 17 Weeks (16thJuly- 5th November 2018)

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| **Week** | **Date** | **Class B.Sc.-I (Practicals)**  **Group GI: Wednesday**  **Group G2: Tuesday**  **Group G3: Saturday** | **Class B.Sc-II (Practicals)**  **Group G1: Wednesday** | **Class B.Sc-III (Practicals)**  **Group G 2: Friday and**  **Saturday**  **GroupG3: Thursday** |
| 1 | 16.07.2018 |  |  |  |
| 17.07.2018 | General introduction of lab and Practicals |  |  |
| 18.07.2018 | General introduction of lab and Practicals | General introduction of lab and Practicals |  |
| 19.07.2018 |  |  | General introduction of lab and Practicals |
| 20.07.2018 |  |  | General introduction of lab and Practicals |
| 21.07.2018 | General introduction of lab and Practicals |  | Study of life cycle of Silk  Moth |
| 22.07.2018 | Sunday | | |
| 2 | 23.07.2018 |  |  |  |
| 24.07.2018 | Classification up to orders with ecological note and economic importance of the following animals: Taxonomic study of Phylum Protozoa |  |  |
| 25.07.2018 | Classification up to orders with ecological note and economic importance of the following animals: Taxonomic study of Phylum Protozoa | Study of Skeleton of Frog |  |
| 26.07.2018 |  |  | Study of life cycle of Silk  Moth |
| 27.07.2018 |  |  | Revision of life cycle of Silk Moth |
| 28.07.2018 | Classification up to orders with ecological note and economic importance of the following animals: Taxonomic study of Phylum Protozoa |  | Study of life cycle of Honey bee |
| 29.07.2018 | Sunday | | |
| 3 | 30.07.2018 |  |  |  |
| 31.07.2018 | |  | | --- | | Shaheed Udham Singh's Martyrdom Day | | | |
| 1.08.2018 | Classification up to orders with ecological note and economic importance of the following animals: Taxonomic study of Phylum Protozoa | Study of Skeleton of Frog |  |
| 2.08.2018 |  |  | Study of life cycle of Honey bee |
| 3.08.2018 |  |  | Revision of life cycle of  Honey bee |
| 4.08.2018 | Classification up to orders with ecological note and economic importance of the following animals: Taxonomic study of Phylum Protozoa |  | Study of Fishes |
| 5.08.2018 | Sunday | | |

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| 4 | 6.08.2018 |  |  |  |
| 7.08.2018 | Classification up to orders with ecological note and economic importance of the following animals: Taxonomic study of Phylum Protozoa |  |  |
|  | 8.08.2018 | Study of Permanent Slides of Phylum Protozoa | Study of Skeleton of Varanus |  |
| 9.08.2018 |  |  | Study of Fishes |
|  | 10.08.2018 |  |  | Study of Fishes |
| 11.08.2018 | Study of Permanent Slides of Phylum Protozoa |  | Revision of Fishes |
| 12.08.2018 | Sundays | | |
| 5 | 13.08.2018 |  |  |  |
| 14.08.2018 | Study of Permanent Slides of Phylum Protozoa |  |  |
| 15.08.2018 | Independence Day   |  | | --- | | **Independence Day** |  |  | | --- | | **Independence Day** | | | |
| 16.08.2018 |  |  | Study of Fishes |
| 17.08.2018 |  |  | Revision of Fishes |
| 18.08.2018 | Study of Permanent Slides of Phylum Protozoa |  | Study of Pests |
| 19.08.2018 | Sunday | | |
| 6 | 20.08.2018 |  |  |  |
| 21.08.2018 | Study of Permanent Slides of Phylum Protozoa |  |  |
| 22.08.2018 | **Id-Ul-Zuha (Bakrid)**   |  | | --- | |  | | | |
| 23.08.2018 | *.* |  | Study of Pests |
| 24.08.2018 |  |  | Study of Pests |
| 25.08.2018 | Classification up to orders with ecological note and economic importance of the following animals: Taxonomic study of Phylum Porifera |  | Study of Pests |
| 26.08.2018 | Sunday | | |
| 7 | 27.08.2018 |  |  |  |
| 28.08.2018 | Classification up to orders with ecological note and economic importance of the following animals: Taxonomic study of Phylum Porifera |  |  |

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|  | 29.08.2018 | Study of Permanent Slides of Phylum Protozoa | Study of Skeleton of Varanus |  |
| 30.08.2018 |  |  | Study of Beaks of birds |
| 31.08.2018 |  |  | Study of Pests |
| 1.09.2018 | Classification up to orders with ecological note and economic importance of the following animals: Taxonomic study of Phylum Porifera |  | Study of Beaks of birds |
| 2.09.2018 | Sunday  Janamashatmi  **Janamashatmi** | | |
| 8 | 3.09.2018 |
| 4.09.2018 | Classification up to orders with ecological note and economic importance of the following animals: Taxonomic study of Phylum Porifera |  |  |
| 5.09.2018 | Classification up to orders with ecological note and economic importance of the following animals: Taxonomic study of Phylum Porifera | Revision of Frog Skeleton |  |
| 6.09.2018 |  |  | Study Claws of birds |
| 7.09.2018 |  |  | Revision of Beaks of Birds |
| 8.09.2018 | Study of Porifera Specimens |  | Study of Claws of Birds |
| 9.09..2018 | Sunday | | |
| 9 | 10.09.2018 |  |  |  |
| 11.09.2018 | Study of Porifera Specimens |  |  |
| 12.09.2018 | Classification up to orders with ecological note and economic importance of the following animals: Taxonomic study of Phylum Porifera | Revision of Varanus Skeleton |  |
| 13..09.2018 |  |  | Revision of Fishes |
| 14.09.2018 |  |  | Revision of Claws of Birds |
| 15.09.2018 | Study of Permament Slides of Porifea Phylum |  | Study of Specimens of Phylum Arthopoda |
| 16.09.2018 | Sunday | | |
| 10 | 17.09.2018 |  |  |  |
| 18.09.2018 | Study of Permament Slides of Porifea Phylum |  |  |
| 19.09.2018 | Study of Porifera Specimens | Study of Skeleton of Gallus |  |
| 20.09.2018 |  |  | Revision of Pests |

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|  | 21.09.2018 |  |  | Study of Specimens of Phylum Mollusca |
| 22.09.2018 | Preparation of Permanent Stained Slides |  | Revision of Specimens of Phylum Arthopoda |
| 23.09.2018 | Sunday | | |
| 11 | 24.09.2018 |  |  |  |
| 25.09.2018 | Preparation of Permanent Stained Slides |  |  |
| 26.09.2018 | Study of Permament Slides of Porifea Phylum | Study of Skeleton of Gallus |  |
| 27.09.2018 |  |  | Revision of Beaks and claws of birds |
| 28.09.2018 |  |  | Revision of Specimens of Phylum Mollusca |
|  | 29..09.2018 | Preparation of Permanent Stained Slides |  | Study of Permanent Slides of Frog |
| 30.09.2018 | Sunday | | |
| 12 | 1.10.2018 |  |  |  |
| 2.10.2018 | Mahatama Gandhi Jayanti | Mahatama Gandhi Jayanti | Mahatama Gandhi Jayantis |
| 3.10.2018 | Preparation of Permanent Stained Slides | Study of Skeleton of  Oryctolagus |  |
| 4.10.2018 |  |  | Study of Specimens of Phylum Arthopoda |
| 5.10.2018 |  |  | Revision of Permanent Slides of Frog |
| 6.10.2018 | Revision of Permanent Slides |  | Test of life cycle of Silk Moth and Honey bee |
| 07.10.2018 | Sunday | | |
| 13 | 08.10.2018 |  |  |  |
| 09.10.2018 | Preparation of Permanent Stained Slides |  |  |
| 10.10.2018 | Maharaja Agrasen Jayanti | Maharaja Agrasen Jayanti | Maharaja Agrasen Jayanti |
| 11.10.2018 |  |  | Study of Specimens of Phylum Mollusca |
| 12.10.2018 |  |  | Test of Fishes |
| 13.10.2018 | Revision of Permanent Slides |  | Test of Pests |
| 14.10.2018 | Sunday | | |

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| 14 | 15.10.2018 |  |  |  |
| 16.10.2018 | Revision of Permanent Slides |  |  |
| 17.10.2018 | Preparation of Permanent Stained Slides | Study of Skeleton of  Oryctolagus |  |
| 18.10.2018 | Dushhera | |  |
| 19.10.2018 |  |  | Test of Beaks of Birds |
| 20.10.2018 | Revision of Specimens |  | Test of Claws of Birds |
| 21.10.2018 | Sunday | | |
| 15 | 22.10.2018 |  |  |  |
| 23.10.2018 | Revision of Permanent Slides |  |  |
| 24.10.2018 | Maharishi Valmiki's Birthday | |  |
| 25.10.2018 |  |  | Study of Permanent Slides of Frog |
| 26.10.2018 |  |  | Test of Specimens of Phylum Arthopoda |
| 27.10.2018 | Test of Permanent Slides |  | Test of Specimens of Phylum Arthopoda |
| 28.10.2018 | Sunday | | |
| 16 | 29.10.2018 |  |  |  |
| 30.10.2018 | Revision of Specimens |  |  |
| 31.10.2018 | Revision | Revision |  |
| 1.11.2018 | **Haryana Day.** | **Haryana Day.** | **Haryana Day.** |
| 2.11.2018 |  |  | Test of Permanent Slides of Frog |
| 3.11.2018 | Test of Specimens |  | Revision |
| 4.11.2018 | Sunday | | |
| 17 | 5.11.2018 |  |  |  |