**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 ProtozoaProtozoa  |  |  |
| 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 |

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|  **Shaheed Udham Singh's Martyrdom Day** |

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| 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 factorson 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

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|  **Independence Day** |

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|  **Independence Day** |

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| 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)**

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|  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 componentsviz 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 JayantiMaharaja 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 |

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| Shaheed Udham Singh's Martyrdom Day |

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| 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

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|  **Independence Day** |

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| 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)**

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|  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 | SundayJanamashatmi**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 |  |   |  |