

**Lesson Plan**  
**Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh**  
**Monthly Teaching Plans- Odd Semester (Semester-I)**  
**Session – 2021-22**

**Department- Zoology**

**Names of the Teachers- Dr. Divya Sharma (Sec.-A)**  
**Ms. Kadambari Pathania (Sec.-B)**

**Class- B.Sc. I (Medical)**

**Sections- A & B**

**Subject- Zoology**

**Paper–I: Biodiversity & Cell Biology-I (ZOO-101)**

Month	Date		Topics to be Covered	Academic Activity Undertaken
	From	To		
September	23.09.2021	30.09.2021	<b>Organization of Cell</b> - Concept of Prokaryotic and Eukaryotic cell, extra nuclear and nuclear organization of cell.	Lecture method using online sources, PPT, videos, Flipped classroom method Practical demonstration using museum specimens, group discussions
October	01.10.2021	31.10.2021	<b>Detailed study of the following protozoan types:</b> <i>Amoeba, Paramecium and Plasmodium.</i>  <b>Classification up to orders with ecological notes and economic importance (if any) of the following:</b> <i>Entamoeba, Trypanosoma, Giardia, Noctiluca, Eimeria, Opalina, Vorticella, Balantidium and Nyctotherus.</i>  <b>Methods in Cell Biology</b> - Principles and applications of light (simple, compound & phase contrast) and electron (SEM & TEM) microscopes Fixation & fixatives, staining techniques (simple and double staining).	Lecture method using online sources, PPT, videos, Flipped classroom method Practical demonstration using museum specimens, group discussions
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 03.11.2021</b>				
November	01.11.2021	30.11.2021	<b>Detailed study of the following animal types:</b> <i>Sycon</i>  <b>Classification up to orders with ecological notes and economic importance (if any) of the following:</b> <i>Grantia, Euplectella, Hyalonema and Spongilla.</i>  <b>Endoplasmic reticulum</b> - Structure, types, associated enzymes and functions <b>Golgi complex</b> - Structure, associated enzymes and functions. <b>Plasma membrane</b> - Structure with	Lecture method using online sources, PPT, videos, Flipped classroom method Practical demonstration using museum specimens, group discussions

			particular references to Fluid Mosaic Model, Osmosis, active and passive transport, endocytosis and exocytosis.  <b>MST</b>	
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 02.12.2021</b>				
December	01.12.2021	16.12.2021	<p><b>Detailed study of the following animal types: <i>Obelia</i></b></p> <p>Classification up to orders with ecological notes and economic importance (if any) of the following: <i>Hydra, Sertularia, Plumularia, Obelia, Tubularia, Bougainvillea, Porpita, Velella, Physalia, Rhizostoma, Millipora, Aurelia, Alcyonium, Tubipora, Zoanthus, Metridium, Madrepora, Favia, Fungia and Astrangia.</i></p> <p><b>Mitochondria</b> - Structure, mitochondrial enzymes and the role of mitochondria in respiration. Mitochondrial DNA</p>	Lecture method using online sources, PPT, videos, Flipped classroom method Practical demonstration using museum specimens, group discussions
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 17.12.2021</b>				
<b>End semester Examination 17.12.2021 to 27.01.2022</b>				

**Lesson Plan**  
**Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh**  
**Monthly Teaching Plans- Even Semester (Semester-II)**  
**Session – 2021-22**

**Department- Zoology**

**Names of the Teachers- Dr. Divya Sharma (Sec.-A)**  
**Ms. Kadambari Pathania (Sec.-B)**

**Class- B.Sc. I (Medical)**

**Sections- A & B**

**Subject- Zoology**

**Paper–I: Biodiversity & Ecology -I (ZOO-201)**

Month	Date		Topics to be Covered	Academic Activity Undertaken
	From	To		
February	03.02.2022	28.02.2022	<p><b>Detailed study of the following animal type:</b>            Arthropoda – <i>Periplaneta</i>            Social organizations in insects (honey bee and termite).</p> <p><b>Classification upto orders with brief ecological note and economic importance (if any) of the following:</b>            Arthropoda: <i>Apis</i>, <i>Lepisma</i> (Silver Fish), <i>Schistocerca</i> (Locust), <i>Poecilocus</i> (Ak grasshopper) <i>Gryllus</i> (Cricket), <i>Mantis</i> (Preying Mantis), <i>Cicada</i>, <i>Forficula</i> (Earwig), <i>Cimex</i>, <i>carabaeus</i> (Dung beetle), <i>Agrian</i> (Dragon fly), <i>Odontotermes</i> (Termite queen), <i>Cimex</i> (bed bug), <i>Cicindela</i> (Tiger beetle), <i>Polistes</i> (Wasp), <i>Bombyx</i> (Silk moth).</p>	Lecture method using online sources, PPT, videos, Flipped classroom method Practical demonstration using museum specimens, group discussions
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 02.03.2022</b>				
March	01.03.2022	31.03.2022	<p><b>Detailed study of the following animal type:</b> Arthropoda - Prawn            Life cycle of <i>Anopheles</i> and <i>Culex</i></p> <p><b>Classification upto orders with brief ecological note and economic importance (if any) of the following:</b>  <i>Peripatus</i>, Prawn, Lobster, <i>Cancer</i> (Crab), <i>Sacculina</i>, <i>Eupagurus</i> (Hermit crab), <i>Lepas</i>, <i>Balanus</i>, <i>Julus</i> (Millipede), <i>Scolopendra</i> (Centipede), <i>Palamnaeus</i> (Scorpion), <i>Aranea</i></p>	Lecture method using online sources, PPT, videos, Flipped classroom method Practical demonstration using museum specimens, group discussions

			(Spider) and <i>Limulus</i> (King crab).  <b>MST</b>	
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.04.2022</b>				
April	01.04.2022	30.04.2022	<b>Ecology</b> - Subdivisions and Scope of ecology. <b>Ecosystem</b> - Components, ecological energetics, food web, introduction to major ecosystems of the world. <b>Ecological factors</b> - Temperature, light and soil as ecological factors.	Lecture method using online sources, PPT, videos, Flipped classroom method Practical demonstration using museum specimens, group discussions
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 02.05.2022</b>				
May	01.05.2022	25.05.2022	<b>Nutrients</b> - Biogeochemical cycles & concept of limiting factors.  Ecological, Morphological, physiological and behavioral adaptations in animals in different habitats.  <b>Population-</b> Characteristics and regulation of population.  <b>Revision and Class test</b>	Lecture method using online sources, PPT, videos Flipped classroom method and group discussions
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 26.05.2022</b>				
<b>End semester Examination 26.05.2022 to 05.07.2022</b>				