

**Lesson Plan**  
**Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh**  
**Monthly Teaching Plans- Odd Semester (Semester-V)**  
**Session – 2024-25**  
**Department- Zoology**  
**Name of the Teacher- Dr. Divya Sharma**  
**Class- B.Sc. III (Medical)**

**Single section**  
**Subject- Zoology**

**Paper–II: OPTION I: MEDICAL ZOOLOGY & MEDICAL LABORATORY TECHNOLOGY-I**  
**(ZOO-502A)**

Month	Date		Topics to be Covered	Academic Activity to be Undertaken
	From	To		
July	22.07.2024	31.07.2024	Introduction to parasitology (pertaining to various terminologies in use). Brief introduction to pathogenic microbes. (Dengue, Chikungunya, Japanese encephalitis, tuberculosis).	Power point presentation, group discussion, assignments, Flipped classroom method
August	01.08.2024	31.08.2024	Epidemic diseases, such as typhoid, cholera, smallpox; their occurrence and eradication programmes.	Power point presentation, group discussion, assignments, Flipped classroom method
<b>Departmental Meeting on 27.08.2024 to review the progress of syllabus as per lesson plans</b>				
September	01.09.2024	30.09.2024	Brief accounts of life history, mode of infection and pathogenicity of the following pathogens with reference to man; prophylaxis and treatment: Pathogenic protozoans: <i>Entamoeba</i> , <i>Trypanosoma</i> , <i>Leishmania</i> , <i>Giardia</i> , <i>Trichomonas</i> and <i>Plasmodium</i> .  <b>MST</b>	Power point presentation, group discussion, assignments, Flipped classroom method
<b>Departmental Meeting on 24.09.2024 to review the progress of syllabus as per lesson plans</b>				
October	01.10.2024	31.10.2024	Brief accounts of life history, mode of infection and pathogenicity of the following pathogens with reference to man; prophylaxis and treatment: Pathogenic helminths: <i>Fasciolopsis</i> , <i>Schistosoma</i> , <i>Echinococcus</i> , <i>Ancylostoma</i> , <i>Trichinella</i> , <i>Wuchereria</i> , <i>Dracunculus</i> and <i>Oxyuris</i> .	Power point presentation, group discussion, assignments, Flipped classroom method
<b>Departmental Meeting on 29.10.2024 to review the progress of syllabus as per lesson plans</b>				
November	01.11.2024	18.11.2024	Life cycle, disease caused and control measures of arthropod vectors: <i>Anopheles stephensi</i> , <i>A. culicifacies</i> , <i>Aedes aegypti</i> , <i>A. albopictus</i> , <i>Culex fatigans</i> , <i>C. tritaeniorhynchus</i> , <i>Mansonia</i> sp., <i>Xenopsylla cheopsis</i> , <i>Pediculus</i> .  <b>Revision and Class test</b>	Power point presentation, group discussion, assignments, Flipped classroom method
<b>Departmental Meeting on 18.11.2024 to review the completion of syllabus as per lesson plans</b>				
<b>End semester Examination 19.11.2024 to 26.12.2024</b>				

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

**Session – 2024-25**

**Department- Zoology**

**Name of the Teacher- Dr. Divya Sharma**

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

**Single section**

**Subject- Zoology**

**Paper–II: OPTION I: MEDICAL ZOOLOGY & MEDICAL LABORATORY TECHNOLOGY-  
 II (ZOO-602A)**

Month	Date		Topics to be Covered	Academic Activity to be Undertaken
	From	To		
January	10.01.2025	31.01.2025	Brief introduction to Cells, organs, specific and non-specific defense mechanisms. Humoral and cell mediated immune-response, Antigens-physical & chemical properties Antibodies- Structure and function of immunoglobulin M, G, A, E and D. Antigen and antibody interactions: Serodiagnostic assays. Vaccines and their types.	Power point presentation, group discussion, assignments, Flipped classroom method
<b>Departmental Meeting on 22.01.2025 to review the progress of syllabus as per lesson plans</b>				
February	01.02.2025	29.02.2025	Biochemistry: Protein estimation, Estimation of blood urea, blood sugar and urine analysis. Histopathology: Common fixatives and staining techniques Laboratory safety rules, hazards and precautions during sample collection and laboratory investigations. <b>Laboratory techniques:</b> Colorimetry, Microscopy (student's and electron microscope), Autoclaving, Centrifugation, Spectrophotometry.	Power point presentation, group discussion, assignments, Flipped classroom method
<b>Departmental Meeting on 27.02.2025 to review the progress of syllabus as per lesson plans</b>				
March	01.03.2025	31.03.2025	<b>Hematology:</b> Collection of blood (Venous and Capillary), Anticoagulants (merits and demerits), Romanowsky's stains <b>Bacteriology:</b> Sterilization, (dry heat, moist heat, autoclave, filtration), Disinfection, staining techniques (gram's stain, AFB stain, etc), Culture media (Defined & Synthetic media & routine laboratory media), Bacterial culture (aerobic and anaerobic), Antibiotic sensitivity. <b>MST</b>	Power point presentation, group discussion, assignments, Flipped classroom method
<b>Departmental Meeting on 27.03.2025 to review the progress of syllabus as per lesson plans</b>				
April	01.04.2025	26.04.2025	<b>Histochemistry:</b> Principle and method of Staining of carbohydrates, proteins and fats with bromophenol blue, Periodic acid Schiff, Sudan Black blue and Feulgen reaction.  <b>Revision and Class test</b>	Power point presentation, group discussion, assignments, Flipped classroom method
<b>Departmental Meeting on 26.04.2025 to review the completion of syllabus as per lesson plans</b>				
<b>End semester Examination 28.04.2025 to 04.06.2025</b>				