

Curriculum plan (Odd Semester 2025-26)

Teacher Name: Dr. K. Vandana Rani

Paper name: **Zoo-GE-19: Immunology: Understanding the body's defence System**

Class type: Theory

Paper shared with: NA

Unit to be taken	Allocated lectures	Month wise schedule to be followed	Tests/ Assignments/ Revision/ Presentations etc
UNIT- 1: Basics of Immunology: History and scope of immunology; Types of immunity: innate and adaptive, Humoral and cell-mediated immunity, Active and Passive immunity; Cells and organs of the immune system, overview of Haematopoiesis.	05	05/08/2025 to 19/08/2025	
UNIT- 2: Antigens and Antibodies Antigenicity, immunogenicity; Structure and types of antibodies; Antigen-antibody interactions (agglutination, precipitation); Monoclonal antibodies production and their therapeutic applications.	7	26/08/2025 to 09/09/2025	Assignment s/ Presentation
UNIT- 3: Immune Response and Mechanisms Major Histocompatibility Complex (MHC I & II); Exogenous and endogenous antigen processing; overview of Cytokines and complement system.	5	23/09/2025 to 07/10/2025	Test
UNIT- 4: Immunological Disorders & Applications Hypersensitivity reactions (Gell and Coombs' classification); Autoimmunity and autoimmune diseases (e.g., rheumatoid arthritis, thyroiditis); Immunodeficiency (e.g., SCID, AIDS)	6	07/10/2025 to 28/10/2025	
UNIT- 5: Applied Immunology Vaccines and immunization programs; Principles of immunodiagnosics (ELISA, RIA, Western blot); Basics of Immunotherapy; Transplantation	7	28.10.25/18.11.25	Revision

Name of Teacher : Dr. K. Vandana Rani

Signature

Curriculum plan (NEP; Odd Semester 2025-26)

Teacher Name: Dr. K. Vandana Rani

Paper name: Zoo-GE-19: Immunology: Understanding the body's defence System

Class type: Practicals

Paper shared with: NA

Unit to be taken	Allocated lectures	Month wise schedule to be followed (G1+G2)	Tests/Assignments/ Revision/ Presentations etc
1. Demonstration of Lymphoid Organ	4	6.08.25/08.08.25	
2. Histological Study of Spleen, Thymus and Lymph Nodes through Slides/ Photographs	4	13.08.25/15.08.25	
3. Preparation of stained blood film to study various types of blood Cells	4	20.08.25/22.08.25	Presentation
4. Ouchterlony's double immuno-diffusion method.	4	27.08.25/29.09.25	
5. ABO Blood group antigen determination	4	03.09.25/12/09.25	
6. Cell counting and viability test from splenocytes of farm bred animals/cell lines.	4	17.09.25/19.10.25	
7. i) Demonstration of ELISA and ii) Demonstration of Immunoelectrophoresis iv). FACS	4	24-09.25/26.09.25	
	4	08.10.25/10.10.25	
	4	15.10.25/17.10.25	
Repeat		30-10-25- ownwards	Revision/ File Evaluation

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