

Curriculum plan (Even Semester 2022-23)

Teacher Name: Dr. K. Vandana Rani

Paper name: LS DSE 4: Immunology

Class type: Theory

Paper shared with: Dr. Rani

Unit to be taken	Allocated lectures	Month wise schedule to be followed	Tests/ Assignments/ Revision/ Presentations etc
Unit 1: Overview of the Immune system i) Historical perspective, ii) early theories of immunology, clonal selection theory. Iii) Innate immunity: defensive barriers of innate immunity, cell types and molecules involved in innate immunity. iv) Adaptive immune system: attributes of acquired immunity, v) Humoral and cellular mediated immunity, vi) active and passive immunity, vii) primary and secondary cellular response, viii) cells and molecules involved in adaptive immunity.	10	03/01/2023 to 01/02/2023	
Unit 3: Antigen i) Antigens and immunogens, ii) antigenicity and immunogenicity, iii) Factors affecting immunogenicity, iv) Antigenic determinants (B and T cell epitopes), v) Concept of antigen recognition by B and T-cells, Vi) Adjuvants and haptens.	08	07/02/2023 to 01/03/2023	Assignments/ Presentation
Unit 4:Antibody i) Structure, different classes and function of antibodies, ii) Antigenic determinants on immunoglobulins, iii) Antigen-antibody interactions as tools for research and diagnosis (precipitation reaction, agglutination, immunofluorescence and ELISA), iv) Polyclonal sera, v) Hybridoma technology for monoclonal antibodies in therapeutics and diagnosis.	10	14/03/2023 to 12/04/2023	Test
Unit 7: Cytokines: Basic Properties and Function	4	18/04/2023 to 26/04/2023	Revision

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Class type: Practical (Group: G2)

Paper shared with: Dr. Rani

Unit to be taken	Allocated lectures	Month wise schedule to be followed (G1)	Tests/Assignments/ Revision/ Presentations etc
1. Demonstration of Lymphoid Organ	4	03.01.23/10.01.23	
2. Histological Study of Spleen, Thymus and Lymph Nodes through Slides/ Photographs	4	17.01.23/24.01.23	
3. Preparation of stained blood film to study various types of blood Cells	4	21.01.23/25.01.23	Presentation
4. Ouchterlony's Double immuno diffusion method	4	31.01.23/07.02.23	
5. ABO blood group Determination	4	14.02.23/21.02.23	
7. Demonstration of ELISA	4	28.02.23/14.03.23	
8. Demonstration of Immunoelectrophoresis	4	21-0.23/28.03.23	
Repeat		04-04-23/11.04.23	Revision/ File Evaluation

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