

## Curriculum plan ( Even Semester 2021-22)

Teacher Name: Dr. K. Vandana Rani

Paper name: LS DSE 4: Immunology

Class type: Theory

Paper shared with: Dr. Manisha Arora Pandit

Unit to be taken	Allocated lectures	Month wise schedule to be followed	Tests/ Assignments/ Revision/ Presentations etc
<b>Unit 1: Overview of the Immune system</b> 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	3/01/2022 to 02/02/2022	
<b>Unit 3: Antigen</b> 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	07/02/2022 to 28/03/2022	Assignments/ Presentation
<b>Unit 4:Antibody</b> 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	02/03/2022 to 06/04/2022	Test
<b>Unit 7: Cytokines:</b> Basic Properties and Function	4	11/04/2022 to 18/04/2022	Revision

Name of Teacher : Dr. K. Vandana Rani

Signature

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**Teacher Name: Dr. K. Vandana Rani**

**Paper name: LS DSE 4: Immunology**

**Class type: Practicals (Group: G1+G2 & G3+G4)**

**Paper shared with: Dr. Mamta Tripathy & Dr. Priya Singh**

Unit to be taken	Allocated lectures	Month wise schedule to be followed (G1+G2)/ G3+G4)	Tests/Assignments/ Revision/ Presentations etc
1. Demonstration of Lymphoid Organ	4	07.01.22/11.01.22	
2. Histological Study of Spleen, Thymus and Lymph Nodes through Slides/ Photographs	4	14.01.22/18.01.22	
3. Preparation of stained blood film to study various types of blood Cells	4	21.01.22/25.01.22	Presentation
4. Ouchterlony's Double immuno diffusion method	4	28.01.22/01.02.22	
5. ABO blood group Determination	4	04.02.22/08.02.22	
7. Demonstration of ELISA	4	11.02.22/15.02.22	
8. Demonstration of Immunoelectrophoresis	4	18-02.22/22.02.22	
Repeat		01-03-22-19.04.22	Revision/ File Evaluation

**Name of Teacher : Dr. K. Vandana Rani**

**Signature**