



Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd.u/s 3of UGC Act 1956, Category A by MHRD [now MoE]

Re-accredited with an A++ Grade by NAAC CGPA 3.65/4, Category I by UGC

Coimbatore-641043, Tamil Nadu, India

Continuous Internal Assessment I – February 2025

II Semester

Class : I UG

Major: Biochemistry and Biotechnology

Time : 2 hrs

Max Marks : 60

23BBCC02 Immunology

Course Outcomes:

CO1: Gain an insight in to the various cells and organs involved in the immune system.

CO2: Understand the components of the immune system and the molecular mechanisms involved in their interactions.

CO3: Gain knowledge on the various disorders and diseases affecting the immune system.

CO4: Comprehend the immunization procedures and defense mechanisms.

CO5: Learn practical aspects of various immunological techniques.

Part A

6 x 1 = 6

Choose the Correct Answer

- Which of the following cells of the immune system do not perform phagocytosis
a. Macrophage b. Neutrophil c. Eosinophil d. Basophil CO1K3
- Adaptive immunity is also called _____
a. innate immunity b. passive immunity c. acquired immunity d. herd immunity CO1K1
- In adults, what is the primary site of hematopoiesis
a. Bone marrow b. Liver c. Lungs d. Heart CO1K2
- Which part of the antibody binds to the antigen?
a. Heavy Chain b. Light Chain c. Constant region d. Variable region CO2K2
- MHC plays important role in all, except
a. Tissue transplantation b. Blood transfusion c. Antigen presentation d. T-cell response CO2K3
- Which type of antibody Cross the Placenta?
a. IgG b. IgE c. IgD d. IgA CO2K2

Part B

3 x 6 = 18

Answer ALL questions

Each answer should not exceed 400 words or two pages

- (a) What is Phagocytosis? Discuss with example
(or) CO1K1
- (b) Compare and contrast Primary and Secondary Immune responses CO1K3
- (a) Describe Antigen Dependent Cell mediated Cytotoxicity (ADCC)
(or) CO1K2
- (b) Classify and add a note on major histocompatibility complex CO2K1
- (a) Summarize the theories of antibody formation .
(or) CO2K1
- (b) Illustrate the structure and function of TCR and BCR CO2K2

Part C

3 x 12 = 36

Answer ALL questions

Each answer should not exceed 800 words or four pages

- (a) Elaborate on the structure and functions of cells of the lymphoid and myeloid lineages
(or) CO1K2
- (b) Discuss about the secondary lymphoid organs CO1K1
- (a) Describe the differentiation and maturation of B-cells and T- cells
(or) CO1K3
- (b) Draw a well labelled structure of immunoglobulin. Discuss the characteristic features and functions of different types of immunoglobulin. CO2K2
- (a) What are the components of complement system? Discuss about the classical and alternate pathways of complement activation
(or) CO2K2
- (b) Explain the Antigen processing pathway with illustration CO2K2

Total Number of QP: 55 (Aided)+40 (SF)