

(6 pages)

Reg. No. : .....

Code No. : 30502 E Sub. Code : CMMI 31

B.Sc. (CBCS) DEGREE EXAMINATION,  
NOVEMBER 2022.

Third Semester

Microbiology – Core

Skill Based – FUNDAMENTALS OF IMMUNOLOGY

(For those who joined in July 2021 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

- The branch of biology that deals with study of immune system in all organism is called \_\_\_\_\_  
(a) Zoology (b) Microbiology  
(c) Immunology (d) Biotechnology
- Any agents that may stimulate the immunosystem and change the response without having any specific antigenic effect by itself \_\_\_\_\_  
(a) Antigens (b) Allergens  
(c) Adjuvants (d) Carriers
- The Immunoglobulin that mediates allergic reaction is \_\_\_\_\_  
(a) Igm (b) IgG  
(c) IgA (d) IgE
- T helper cell mediated hypersensitivity is \_\_\_\_\_  
(a) Type I (b) Type II  
(c) Type III (d) Type IV
- Type III hypersensitivity is triggered by \_\_\_\_\_  
(a) Mast cells  
(b) K cells  
(c) Deposition of Ag-Ab complex  
(d) Th cells

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- Which one of the following immunity is obtained during a life time?  
(a) Acquired Immunity (b) Active Immunity  
(c) Passive Immunity (d) None of the above
- Which of the following cells is involved in cell-mediated immunity?  
(a) Leukaemia (b) T-cells  
(c) Mast cells (d) Thrombocytes
- Which of the following protects our body against disease causing pathogens?  
(a) Respiratory system (b) Immune system  
(c) Digestive system (d) Respiratory system
- How many types of antibodies are there?  
(a) 5 (b) 3  
(c) 2 (d) 4
- Which of the followings statements is true about the IgM of humans?  
(a) IgM can cause the placenta  
(b) IgM can protect the mucosal surface  
(c) IgM is primarily restricted in the circulation  
(d) IgM is produced by high-affinity plasma cells

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PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).  
Each answer should not exceed 250 words.

- (a) Write about classify the blood cells.  
Or  
(b) Write a short notes on functions of immune system.
- (a) Define – Immune system and explain with examples.  
Or  
(b) Illustrate cell mediated immune response with explanation.
- (a) Describe the structure of Immunoglobulins.  
Or  
(b) Discuss bout properties of complements.
- (a) Explain in detail of steps involved in ELISA test.  
Or  
(b) Summarize the immune complexes in Tissue demonstration.

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15. (a) Differentiate between Tumour and Normal cells.

Or

- (b) Comment on transplantation technology.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b)  
Each answer should not exceed 600 words.

16. (a) Analyze the scope and importance of immunology.

Or

- (b) List out discoveries in the field of immunology.

17. (a) Discuss in detail of secondary Lymphoid organs.

Or

- (b) Enumerate the structure and properties of cells of immune system.

18. (a) Analyze the various types of vaccines and its applications.

Or

- (b) Evaluate the types of Antigens with its properties.

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19. (a) Write an account on Monoclonal antibodies.

Or

- (b) State the process of Antigen - Antibody reactions with one example.

20. (a) Explain in detail of Type-III hypersensitivity reactions.

Or

- (b) Describe about immunodeficiency disease with one example.

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