

(6 pages)

Reg. No. :

Code No.: 30402 E Sub. Code: EMMI 41/
FCMI 41

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2026.

Fourth Semester

Microbiology – Core

Major – IMMUNOLOGY AND
IMMUNOTECHNOLOGY

(For those who joined in July 2023 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. _____ discovered MAST cells.
(a) Paul Ehrlich
(b) Metchnikoff
(c) Louis Pasteur
(d) Tyndol

2. _____ is a euglobin present in normal serum and causes lysis of Gram negative bacteria with the help of Mg ++ and complement.
(a) Phagosome (b) phagolysosome
(c) monocytes (d) properdin
3. Substance of low molecular weight that do not induce formation of antibody but can cause delayed hypersensitivity are called _____.
(a) hapten (b) proantigen
(c) toxin (d) antibody
4. Immunoglobulin denotes chemical structure of _____.
(a) Fat (b) carbohydrate
(c) protein (d) cellulose
5. Flocculation test may be done in slide for _____ test.
(a) VDRL (b) streptolysin
(c) toxin (d) cellulose

6. _____ index is defined as the ratio of phagocytic activity of patient's blood
- (a) Opsonic (b) antigen
(c) antibody (d) complement
7. Graft placed on another individual of the same genetic constitution is called _____.
- (a) autograft (b) isograft
(c) allograft (d) xenograft
8. _____ compatibility is essential in all tissue transplantation.
- (a) ABO (b) CLA
(c) RELP (d) PCR
9. Inducing antigens are called _____.
- (a) Allergens (b) immunogens
(c) graft (d) haptens
10. _____ test is positive in tuberculoid and negative in lepromatous leprosy.
- (a) Histoplasmin (b) toxoplasmin
(c) frei (d) Lepromin

PART B — (5 × 5 = 25 marks)

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

11. (a) Discuss about immunohaematology.
- Or
- (b) Write about lymphoid tissues.
12. (a) Define antigen and antibody reaction? Add notes on opsonisation.
- Or
- (b) Explain about cross reactivity.
13. (a) Write about immunofluorescence technique.
- Or
- (b) Describe briefly about monoclonal antibodies.
14. (a) Write short notes on HLA typing.
- Or
- (b) Discuss about tumor immunology.

15. (a) Focus on the importance of organ specific auto immune disorders.

Or

- (b) List the salient features of Type II Hypersensitivity reaction.

PART C — (5 × 8 = 40 marks)

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

16. (a) Write a detail notes on secondary lymphoid organs.

Or

- (b) What is apoptosis. Add notes on T - cell processing and presentation?

17. (a) List out the structure and properties of Antibodies.

Or

- (b) Differentiate active and passive immunization.

18. (a) Discuss about principle and procedure for RIA

Or

- (b) Explain in detail about RAST.

19. (a) Write a detail notes on MHC antigen.

Or

- (b) Discuss about tissue transplantation and grafting.

20. (a) Focus on Type III hypersensitivity reaction.

Or

- (b) Write about non organ specific auto immune disorders.