

2016 Scheme

QP Code: 411020

Reg. No.....

Fourth Year B.Sc. Medical Biochemistry Degree Regular/Supplementary Examinations February 2026

Paper XII - Immunology and Immunochemistry

Time: 3 Hours

Total Marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Essays

(2x15=30)

1. Define immune response. Describe the mechanisms and steps involved in cell-mediated immunity.
2. What are vaccines. Explain their classification and discuss the principle and applications of recombinant vaccines.

Brief Essays

(2x10=20)

3. Dendritic cells – development, types, and roles in immune response.
4. Explain radioimmunoassay (RIA) – principle, steps, and uses.

Short answers

(6x5=30)

5. Differences between innate and adaptive immunity.
6. Role of macrophages in immunity.
7. Immunological basis of graft rejection
8. Immunodiffusion – principle and applications.
9. Characteristics of antigens.
10. Type III hypersensitivity – mechanism

Comment on

(10x2=20)

11. Primary lymphoid organs
12. Interferons
13. Toll-like receptor pathways
14. Immunoglobulin E
15. Acute phase proteins – examples and functions.
16. MHC class I molecules
17. Neutralization reaction
18. CRISPR in immunology
19. Autoimmune diseases – give two examples
20. Complement fixation test

CORRECTION / NO-CORRECTION FILE
--

QPCODE: 411020

Dated: 04-02-2026

Question No. 13

Replaced with "Cell surface Receptors"

Question No. 18

Replaced with "Tumor Markers"

Corrections/Modifications/Replacement of Questions if any shall be made available to all students. Take the print out of the Correction File in such cases and distribute to all students.

(Sd/-)

CONTROLLER OF EXAMINATIONS