



RAN-2503001304011001 / 2503000504011111

B.Sc. Biotechnology (Sem. IV) Examination April - 2026

Biotechnology : Fundamentals of Immunology

Time: 1 Hour]

[Total Marks: 25

સૂચના : / Instructions (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fill up strictly the above details on your answer book. (2) Figures to the right indicate full marks of the question. (3) Draw neat and labeled diagrams whenever necessary.	Seat No.: <table border="1"> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> Student's Signature						

Q. 1 Answer in brief any five of the following: (05)

- Define inflammation.
- Name the first antibody produced.
- Name the site of T-cell maturation.
- What are acute phase proteins?
- What is immunology?
- Define immunotechnology.

Q. 2 Attempt any two of the following: (10)

- Discuss in detail the activation of complement system.
- What is haematopoiesis? Discuss the cells of the immune system.
- Enlist the chemical mediators and discuss the role of any two in detail.

Q. 3 Attempt on any two of the following: (10)

- Enlist the various stages of phagocytosis. Discuss the attachment engulfment and phagosome formation.
- Compare and contrast MHC I and MHC II molecules.
- Give a diagrammatic representation of T-cell receptor complex in T-helper cell.