



RAN-2003001105020001

B.Sc. Biotechnology (Sem. - V) Examination October - 2025

Immunotechnology (Old)

Time: 2 Hours]

[Total Marks: 50

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.
- (3) Draw neat and labelled diagrams wherever necessary.

Seat No.:

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Student's Signature

Q. 1 Define/Answer in short (Any Four):

(8)

- a) Mention types of autoimmune diseases with suitable examples.
- b) Erythroblastosis fetalis.
- c) Two examples of attenuated vaccines.
- d) Define myeloma tumour.
- e) What is the bacterial agglutination?

Q. 2 Attempt Any Two:

(14)

- a) Write a note on Hybridoma technology.
- b) Explain the principle and working of Precipitation with a neat labelled diagram.
- c) Describe monoclonal antibody as abzymes.

Q. 3 Explain in detail Any Two:

(14)

- a) Explain Sandwich ELISA with diagram.
- b) What is the difference between hypersensitivity and autoimmune disease?
- c) Explain the types IV hypersensitivity reactions with suitable examples.

Q. 4 Attempt Any Two of the following:

(14)

- a) Give a short note on Rheumatoid Arthritis.
- b) Explain the principle and types of vaccines.
- c) Give a short not on Immunodeficiency.