

RAN-2603001306044001

B.Sc. (Biotechnology) (NEP) (Sem. VI) Examination March - 2026

BT-ME-601 : Pharmaceutical Biotechnology

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

Seat No.:

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Student's Signature

Q. 1 Short Questions (Any 5 out of 6)

(05)

- i. Define Pharmacokinetics.
- ii. List out the phases in drug discovery.
- iii. State any two applications of DNase.
- iv. Define TDD.
- v. Compare the benefits of Humulin over animal originated insulin.
- vi. What is the IND?

Q. 2 Short Note/Brief Answers (Any 2 out of 3)

(10)

- i. Explain the mechanism of treatment of cystic fibrosis using DNase.
- ii. Write a note on Antisense technology.
- iii. A scientist is planning for the deployment of a chemical/molecule as drug for the treatment of localised tumour in the lungs. List out the advantages and limitation of liposome and biopolymer that can be used for this drug delivery. Claim the choice of any one system and justify it.

Q. 3 Short Note/Brief Answers (Any 2 out of 3)

(10)

- i. Explain the importance of toxicity and pharmacokinetics studies in early drug discovery phase.
- ii. Explain the drug regulatory authorities that govern the Indian jurisdiction.
- iii. Describe the different components of drug development.