

**RAN-2103001106020001****B.Sc. Biotechnology (Sem. -VI) Examination September - 2025****BT 17: Pharmaceutical Biotechnology****Time: 2 Hours]****[Total Marks: 50****સૂચના : / Instructions**

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the details of signs on your answer book

Name of the Examination:

 B.Sc. Biotechnology (Sem. -VI)

Name of the Subject :

 BT 17: Pharmaceutical Biotechnology
Subject Code No.: **2103001106020001**

Seat No.:

Student's Signature

2. Figures to the right indicate full marks.
3. Draw neat and labelled diagrams wherever necessary.

Q-1. Attempt the following questions: (Any Four)**[08]**

- a) List any two products of Genetech.
- b) Identify the organisms used to produce approved recombinant proteins.
- c) State medical importance of SOD.
- d) Define ADME.
- e) Expand the term: IND.

Q-2. Attempt Any Two:**[14]**

- a) List and describe any two well-established dedicated biopharmaceutical companies.
- b) Justify: Hormones can be used as a therapeutic agents.
- c) Discuss merits and demerits of antisense technology.

Q-3. Explain in detail Any Two:**[14]**

- a) Explain aim and challenges for drug delivery system.
- b) Describe various phases of drug development.
- c) Justify why clinical pharmacology is essential for drug safety and efficacy.

Q-4. Attempt Any Two of the following:

[14]

- a) Define: CDER & CBER. Explain their roles in regulating drugs and associated products.
 - b) Determine how European regulations influence the approval of biopharmaceutical products.
 - c) List major milestones in the chronological development of the pharmaceutical industry.
-