



RAN-2103001106020001

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

BT - 17 : Pharmaceutical Biotechnology (Old) (Paper - 2)

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.: <table border="1"> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> Student's Signature						

Q. 1 Attempt the following questions: (08)

1. Mention any four host cells for the production of engineered protein.
2. How native source is superior for the extraction of protein?
3. Enlist any four challenges for drug delivery.
4. Give any two names of drugs derived from natural products.
5. Define : Pharmacokinetics

Q. 2 Attempt Any Two: (14)

- 1) What is Omics technology? State importance of Omics technology in biopharmaceuticals.
- 2) Describe structural aspects of liposomes. State merits and demerits of it.
- 3) Describe strategies used to create antisense effect. Enlist advantages of antisense drugs.

Q. 3 Explain in detail Any Two: (14)

- 1) Explain role of RISC complex in gene regulation process.
- 2) Why project planning is necessary? Write down important aspects of project planning.
- 3) Write a brief note on novel drug delivery methods..

Q. 4 Attempt Any Two of the following: (14)

- 1) Write a note on reproductive toxicity and teratogenicity.
- 2) What is an IND? How IND is helpful for drug approval?
- 3) Describe in detail on European regulations.