Roll No. | | | | | | | | | | | | | Total No. of Pages : 01

Total No. of Questions : 08

M.Tech (Bio Tech) EL-I (2018 Batch) (Sem.–1)

PHARMACEUTICAL BIOTECHNOLOGY

Subject Code : MTBT-108-18

M.Code :75768

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :
1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWELVE marks.

1. (a) Discuss the various phases of Drug Discovery and Development Process. (08)
   (b) Define Rational Drug Design. What are the different strategies of Rational Drug Design? (02+02)
2. Discuss the process of the production of monoclonal antibodies and add a note on its merits when compared to other methods of antibody production. (12)
3. Insulin is used for the management of Diabetes. How has recombinant DNA technology revolutionised the production of Human Insulin? Add a note on different types (native and engineered) Insulin being produced currently. (08+04)
4. Write Short notes on (**any two**- 600 words max.) (06×2=12)
   a) Biosimilars
   b) Biomedical applications of protein drugs
   c) High throughput Screening
5. Give an account of different routes of administration of Drugs, with relevant examples. (12)
6. (a) Explain the role of USFDA in the process of Drug Approval. (08)
   (b) What are therapeutic peptides? Give properties and routes of administration of therapeutic peptides. (01+03)
7. (a) Give brief account on the role of protein engineering in drug designing. (06)
   (b) Why are protein therapeutics generally not active on oral administration? (06)
8. Discuss the major elimination pathways for protein drugs after administration. (12)

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.