

2055

M. E. (Biotechnology) Second Semester
Elective – II

MEBIO-205 (b): Pharmaceutical Biotechnology

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. I which is compulsory.

x-x-x

I. Write short notes on following:

- a) Stealth liposomes
- b) Artificial enzymes
- c) Plasma protein binding
- d) Bioavailability
- e) Computer aided drug design (CADD) (5×2)

II. What are the various mechanisms of drug absorption? Discuss the mechanism of passive diffusion. (10)

III. Distinguish between:

- a) Liposomes and Niosomes
- b) GMP and cGMP
- c) SAR and QSAR
- d) Phase 1 and Phase2 metabolism
- e) Immunogen and Antigen (5×2)

IV. Describe the role of molecular modeling in drug discovery. (10)

V. Discuss various factors contributing to immunogenicity to a biopharmaceutical. (10)

VI. Write briefly about following with examples:-

- a) Dose dependent kinetics
- b) Transdermals (10)

VII. What factors should be considered in the design of a controlled drug delivery system? (10)

x-x-x