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18BT72

Seventh Semester B.E. Degree Examination, July/August 2022
Clinical and Pharmaceutical Biotechnology

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Discuss the development of Pharmaceutical Industry. (10 Marks)
b. Explain various Physio – chemical considerations in manufacturing of drugs. (10 Marks)

OR

- 2 a. Define Granulation. Explain types of granulation. (08 Marks)
b. Describe the purpose and different types of packaging techniques in Pharma Industry. (08 Marks)
c. Write short notes on Herbal extracts. (04 Marks)

Module-2

- 3 a. Explain Pharmacokinetics of protein based drugs. (10 Marks)
b. Explain in detail phase I metabolism. (10 Marks)

OR

- 4 a. Describe Pharmacodynamic parameters of drugs. (10 Marks)
b. Mention all the conjugation reaction during phase II metabolism and explain any three. (10 Marks)

Module-3

- 5 a. Write a detailed note on the classification of drugs based on therapeutic actions with examples. (10 Marks)
b. Write short notes on :
i) Antibiotics ii) Non – Steroidal contraceptives. (10 Marks)

OR

- 6 a. Explain the Pharmao therapy of migraine. (10 Marks)
b. Write short notes on :
i) Vitamins ii) Hormone Replacement therapy. (10 Marks)

Module-4

- 7 a. With suitable examples, explain how hormones and growth factors can be used as Therapeutics. (10 Marks)
b. Explain Liposome – based drug delivery system. (10 Marks)

OR

- 8 a. Write a note on various blood components and their preservation. Add a note on Safety guidelines for whole blood transfusion. (10 Marks)
b. Explain Nano particles – based drug delivery system. (10 Marks)

Module-5

- 9 a. What is Epidemiology Study design? Explain in detail about type of Epidemiology study design. (10 Marks)
- b. Give the importance of informed consent for Clinical trials. (10 Marks)

OR

- 10 a. Explain various toxicity studies to evaluate safety of drugs. (10 Marks)
- b. Write short notes on :
- i) Placebo Responses ii) Clinical Research Institutes. (10 Marks)
