18BT72

## Seventh Semester B.E. Degree Examination, Feb./Mar. 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 Discuss on Physiochemical consideration in manufacturing of Biotech products and Herbal 1 medicine. (10 Marks) Explain concepts and testing of Preformulation aspects of Pharmacoproduct. (10 Marks) Define Capsules. Explain the process of manufacturing of hard gelatin capsule. (10 Marks) b. Discuss on various packaging material used for construction of containers in Pharma Industries. (10 Marks) Module-2 Explain the concepts of Agonist & Antagonist in receptor in activation and inhibition. 3 (10 Marks) b. Define Drug Metabolism. Explain Phase I pathway of metabolism, with suitable example. (10 Marks) OR Describe the pharmacokinetic principle and parameters in design of Safer drug. (10 Marks) b. Explain in detail on Glucuronidation conjugates, Acetylation, Methylation conjugates reaction with examples. (10 Marks) Module-3 Summarize an Pharmacotherapy of Migraine in detail. (10 Marks) Illustrate on classification of Analgesics and their mechanism of action. (10 Marks) What are Antacids? Explain the types of Antacids, with suitable example. (10 Marks) Discuss on Pharmacotherapy of Diabetic Mellitus. (10 Marks) Module-4 Discuss in detail on Preservation and Clinical use of Blood and Blood component. (10 Marks) Explain on Clinical importance of Therapeutic Harmones. (10 Marks) Illustrate on Liposome Mediated drug delivery system. (10 Marks) Summarize on Therapeutic use of Interferon. (10 Marks) Module-5 Explain in detail on Preclinical development to support testing of new compounds in vitro 9 and in vivo. (10 Marks) b. Write a short note on : i) Placebo Response ii) Data Management. (10 Marks) OR

Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8=50, will be treated as malpractice.

a. Define Epidemiology. Explain types of Epidemiological studies and its advantages and 10 disadvantages. (10 Marks)

b. Write short note on: i) Safety testing ii) Concept of Pharmacovigilance. (10 Marks)