

B.E./B.TECH. Degree Examination, December 2020

Fifth Semester

BT16006 – Biopharmaceutical Technology

(Regulation 2016)

Time: Three hours

Maximum : 80 Marks

Answer **ALL** questions**PART A - (8 X 2 = 16 marks)**

1. The main mechanism of most drugs absorption in GI tract is:
 - a. Active transport (carrier-mediated diffusion)
 - b. Filtration (aqueous diffusion)
 - c. Endocytosis and exocytosis
 - d. Passive diffusion (lipid diffusion)
2. Chemical name of Tylenol?
 - a. Acetyl salicylic acid
 - b. Paracetamol
 - c. Acetaminophen
 - d. Macrogol gels
3. Which of the following is a second generation cephalosporin?
 - a. Ceftazidime
 - b. Cephalothin
 - c. Cefotaxime
 - d. Cefaclor
4. Which of the following has high bioavailability in the neonate when compared with older children/adults?
 - a. Penicillin
 - b. Digoxin
 - c. Acetaminophen
 - d. Diazepam
 - e. Phenobarbital
5. What does pharmaco-economics deal with?
6. Differentiate pharmacodynamics and pharmacokinetics.
7. Define the role of preservatives and give examples, which are used in preparation of syrups.
8. Mention the hormones secreted by pancreas.

PART B - (4 X16 = 64 marks)

09. (a) Explain the role of FDA in drug development process. (16)

(OR)

- (b) Elaborately discuss the importance of drug discovery, drug design and various phases involved in the clinical development of investigational drugs as dosage form. (16)

10. (a) Biological activity of a drug does not simple depend on its chemical structure but also on its physicochemical properties. Illustrate the above statement with suitable examples. (16)

(OR)

- (b) Classify analgesic drugs with examples & discuss pharmacological actions of any two. (16)

11. (a) Enlighten the general requirements to set up a biopharmaceutical company. (16)

(OR)

- (b) Give detailed information about modern packing techniques for the pharmaceutical products. (16)

12. (a) Differentiate and explain the dry and wet granulation methods of tablet manufacturing. (16)

(OR)

- (b) Discuss the role of recombinant drugs in therapeutics. (16)