

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph. - SEMESTER-VI • EXAMINATION – WINTER -2022

Subject Code: 2260004**Date:30/12/2022****Subject Name: Medicinal Chemistry II****Time: 02:30pm to 05:30pm****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What is drug metabolism? Describe various sites of drug metabolism. **06**
(b) Describe various metabolic oxidation reactions by giving suitable drug examples. **05**
(c) Why phase II metabolism is also known as conjugation reaction? Discuss sulfate conjugation. **05**
- Q.2** (a) Define receptors. Enlist types of it. Write in detail about ion channel receptors. **06**
(b) Write in brief about various bonds formed during drug-receptor interactions. **05**
(c) Explain the theories of drug-receptor interactions. **05**
- Q.3** (a) Enlist the classes of CNS stimulants. Write a note on hallucinogens. **06**
(b) Discuss the structure-activity relationship of tricyclic antidepressants. **05**
(c) Write the synthesis, IUPAC name and uses of Imipramine. **05**
- Q.4** (a) Classify the NSAIDs with chemical structures. **06**
(b) Write the synthetic steps of Mefenamic acid and Diclofenac. **05**
(c) Write a note on Disease Modifying Anti-Rheumatoid Drugs. **05**
- Q.5** (a) What are hypnotics? Classify the sedative-hypnotics with chemical structures. **06**
(b) Write the medicinal chemistry of inhalational anesthetics. **05**
(c) Discuss the SAR of barbiturates. **05**
- Q. 6** (a) Write the synthesis and uses of Carbamazepine and Lignocaine. **06**
(b) Classify the antiepileptics with chemical structures. **05**
(c) Explain the SAR of local anesthetics. **05**
- Q.7** (a) Write the SAR and few examples with structures of antipsychotic phenothiazines. **06**
(b) Write a note on drugs used in Alzheimer's disease. **05**
(c) Write a note on antiparkinsonian drugs. **05**
