

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph- SEMESTER-VI • EXAMINATION – WINTER-2020

Subject Code: 2260004**Date: 11/01/2021****Subject Name: Pharmaceutical Chemistry – VIII (Medicinal Chemistry – II)****Time: 2:00 PM TO 4:00 PM****Total Marks: 54****Instructions:**

1. Attempt any **THREE** questions from Q-1 to Q-6.
2. **Q.7** is compulsory to attempt.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.

- Q.1** (a) Define and classify general anesthetics with example. Explain Structure activity relationship of Benzodiazepines. **06**
- (b) Explain Structure activity relationship and mode of action of Tricyclic antidepressants. **05**
- (c) Give synthesis of L-Dopa and Amphetamine. **05**
- Q.2** (a) Explain different theory of drug-receptor interactions in detail. **06**
- (b) Write a brief note on factors affecting drug- receptor interaction. **05**
- (c) Define Xenobiotics. Give importance of CYP-450 in drug metabolism **05**
- Q.3** (a) What is a CNS stimulant? Explain classification of CNS stimulants with suitable example. Write a brief note on hallucinogenic agents. **06**
- (b) What is Parkinson's disease? Write a note on antiparkinson's agents. **05**
- (c) Give synthesis of Halothane and Lignocaine. **05**
- Q.4** (a) Define and classify local anesthetics. Explain the SAR of Barbiturates. **06**
- (b) Write a brief note on factors affecting drug metabolism. **05**
- (c) Give synthesis of Thiopental sodium and Phenobarbitone. **05**
- Q.5** (a) What is psychosis? Explain briefly about SAR for Phenothiazines. **06**
- (b) Write a brief note on antigout agents. **05**
- (c) Give synthesis of Fluoxetine and Imipramine. **05**
- Q. 6** (a) Explain Various forces involved in drug-receptor interaction. **06**
- (b) Explain briefly about SAR for Local anesthetic agents. **05**
- (c) Give synthesis of Chlordiazepoxide and Phenytoin. **05**
- Q.7** (a) Write a brief note on Phase-I and Phase-II metabolism in detail. **06**
- OR**
- (a) Write a brief note on Cognition enhancers. **06**
- OR**
- (a) Write synthesis of Mefenamic acid and Nimesulide. **06**
