

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 6 EXAMINATION – SUMMER -2019

Subject Code: 2260004**Date: 14-05-2019****Subject Name: Pharmaceutical Chemistry – VIII (Medicinal Chemistry - II)****Time: 02:30 PM TO 05:30 PM****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) Enlist theories of Dug-Receptor interactions. Describe any three as per your knowledge. **06**
(b) Discuss on factors affecting Dug-Receptor interactions. **05**
(c) Explain microsomal oxidation catalyzed by CYP450 including CYP450 cycle. **05**
- Q.2** (a) Define drug metabolism. What do you mean by phase-I reactions? Enlist phase-I reactions and explain oxidation reaction in detail. **06**
(b) Discuss factors affecting drug metabolism. **05**
(c) Give SAR of phenothiazines. **05**
- Q.3** (a) Give synthesis and use of: (Any three) **06**
i). Phenytoin ii). Thiopental iii). Halothane iv). Chlorpromazine.
(b) Define general anesthetics. Discuss stages of anesthesia in detail. **05**
(c) Define and classify antidepressant agents with at least three drug examples and one structure of each category. **05**
- Q.4** (a) Define and classify antiepileptic agents with at least three drug examples and one structure of each category. **06**
(b) Give SAR of benzodiazepines. **05**
(c) Write a short note on Analeptics. **05**
- Q.5** (a) Give synthesis and use of: (Any three) **06**
i). Paracetamol ii). Aspirin iii). Diclofenac iv). Indomethacin.
(b) Give synthesis, IUPAC name and use of Imipramine OR Carbamazepine. **05**
(c) Give an informative note on Cognition enhancers. **05**
- Q. 6** (a) Give SAR of benzoic acid and aniline derivatives with local anesthetic activity. **06**
(b) Share your knowledge in detail on DMARDs. **05**
(c) Give structure of: (Any five) **05**
i). Amphetamine ii). Allopurinol iii). Ibuprofen iv). L-dopa v). Naproxen
vi). Fluoxetine.
- Q.7** (a) Write a short note on antiparkinson agents. **06**
(b) Define and classify sedative and hypnotics with at least three drug examples and one structure of each category. **05**
(c) Give an informative note on drugs for the Alzheimer's disease. **05**
