

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Ph. - SEMESTER-VI EXAMINATION – WINTER -2019

Subject Code: 260004

Date: 04/12/2019

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.**

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|-------------|---|-----------|
| Q.1 | (a) Write a note on ionotropic receptors. | 06 |
| | (b) Describe various theories of drug-receptor interaction. | 05 |
| | (c) Discuss the factors affecting the drug-receptor interaction. | 05 |
| Q.2 | (a) Define xenobiotics. Describe any four oxidative reactions of phase-I metabolism. | 06 |
| | (b) Explain hydrolytic reactions of phase-I metabolism with examples. | 05 |
| | (c) Define conjugation reactions of drug metabolism. Write about sulfate conjugation. | 05 |
| Q.3 | (a) Describe the SAR of muscarinic antagonists. | 06 |
| | (b) Write the mechanism of action and one example with structure of reversible and irreversible anticholinesterases. | 05 |
| | (c) Write the synthesis of dicyclomine and isoprenaline. | 05 |
| Q.4 | (a) Classify the sympatholytics with chemical structures. | 06 |
| | (b) Write a short note on ganglion blockers. | 05 |
| | (c) Discuss the structural modifications phenyl ring of phenylethanolamines. | 05 |
| Q.5 | (a) Write a note on tricyclic antidepressants. | 06 |
| | (b) Define hallucinogens. Write the examples of them which are unrelated to monoamine neurotransmitters. | 05 |
| | (c) Write the synthesis and use of amphetamine and imipramine. | 05 |
| Q. 6 | (a) Explain the SAR of phenothiazines as antipsychotic drugs. | 06 |
| | (b) Classify the anxiolytics with chemical structures. | 05 |
| | (c) Write any two classes of antiepileptics. | 05 |
| Q.7 | (a) What are opioid analgesics? Discuss about benzomorphan class of them. | 06 |
| | (b) Write the examples with structures of selective COX-II inhibitors. | 05 |
| | (c) Define DMARDs. Discuss gold compounds used as DMARDs. | 05 |
