

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – VI • EXAMINATION – WINTER • 2015

Subject Code: 2260004

Date: 04-01-2016

Subject Name: Pharmaceutical Chemistry VIII (Medicinal Chemistry-II)

Time: 02:30 pm - 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) Classify receptors? Describes theories of drug receptor interaction in detailed. | 06 |
| | (b) Describe various forces involved in drug receptor interaction with examples. | 05 |
| | (c) Write short note on CYP450 in detail. | 05 |
| Q.2 | (a) What are xenobiotics? How drugs metabolized in Phase-I metabolism? Explained the same with examples. | 06 |
| | (b) What is Phase-II metabolism? How glucoronide conjugation helps to metabolized drug molecules. Explain with examples. | 05 |
| | (c) Discuss factor affecting drug metabolism in detailed. | 05 |
| Q.3 | (a) Discuss in detailed SAR of Tricyclic antidepressant. | 06 |
| | (b) Write short notes on analeptic agents. | 05 |
| | (c) Write synthesis of any two: | 05 |
| | a) Phenytoin | |
| | b) Imipramine | |
| | c) Halothane | |
| Q.4 | (a) Define hypnotic and sedative ? Write Detailed SAR of benzodiazepines. | 06 |
| | (b) Write SAR of local anesthetic agents with respect to benzoic acid and aniline derivatives. | 05 |
| | (c) Write short notes on general anesthetic agents. | 05 |
| Q.5 | (a) Define antipsychotic agents. Write detailed SAR of phenothiazines. | 06 |
| | (b) Write synthesis of any two: | 05 |
| | a) Phenobarbitone | |
| | b) Lignocaine | |
| | c) Chlorpromazine | |
| | (c) Write SAR of Barbiturates. | 05 |
| Q. 6 | (a) Write short note on Antiparkinson's agents in detailed. | 06 |
| | (b) What is DMARDS? Write detailed short notes on it. | 05 |
| | (c) Write Mechanism of action, uses and side effects of Selective Serotonin Reuptake Inhibitors. | 05 |
| Q.7 | (a) Write Mechanism of action, uses and side effect of NSAIDs. | 06 |
| | (b) Write synthesis of any two: | 05 |
| | a) Ibuprofen | |
| | b) Allopurinol | |
| | c) Diclofenac | |
| | (c) What are cognition enhancers? Write short notes on drug used in treatment of Alzheimer's disease. | 05 |