

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm - SEMESTER-VI • EXAMINATION – SUMMER -2021

Subject Code: 260004**Date:09/08/2021****Subject Name: Pharmaceutical Chemistry-VII (Medicinal Chemistry)****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.

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| Q.1 | (a) Explain in detail about various theories of drug-receptor interactions. | 06 |
| | (b) What is metabolism? Explain Phase-1 metabolism in detail. | 05 |
| | (c) Write short notes on CYP450. | 05 |
| Q.2 | (a) What are cholinergic agents? Explain SAR of cholinomimetics in detail. | 06 |
| | (b) Write detail SAR on cholinergic antagonist. | 05 |
| | (c) Write synthesis of Neostigmine and Salbutamol | 05 |
| Q.3 | (a) Briefly explain SAR of <i>B</i> -phenyl ethanolamines. | 06 |
| | (b) Write detail notes on Neuromuscular Junction Blockers. | 05 |
| | (c) Write synthesis of Fluoxetine and Imipramine. | 05 |
| Q.4 | (a) What are antidepressants ? Briefly explain SAR of Tricyclic antidepressants. | 06 |
| | (b) Write SAR of Benzodiazepines. | 05 |
| | (c) Write synthesis of Lignocaine and Phenytoin. | 05 |
| Q.5 | (a) What are general and local anesthetics? Write detail SAR on local anesthetics. | 06 |
| | (b) Write mechanism of action, uses and side effects of Antiparkinson's agents. | 05 |
| | (c) Write synthesis of pethidine and Chlorpromazine. | 05 |
| Q. 6 | (a) What are differences between Opioid Analgesic and NSAIDs? Write chemical classification of NSAIDs with minimum one structure in each class. Write short notes on COX-2 Inhibitors. | 06 |
| | (b) Briefly explain DMARDs. | 05 |
| | (c) Write synthesis of Pethidine and Methadone. | 05 |
| Q.7 | (a) Write detail notes on drugs acting on Alzheimer's disease. | 06 |
| | (b) Write short notes on cognition enhancers. | 05 |
| | (c) Write synthesis of Nimesulide and Diclofenac. | 05 |
