

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. – SEMESTER – VI • EXAMINATION – WINTER • 2015

Subject Code: 260004

Date: 04-01-2016

Subject Name: Pharmaceutical Chemistry-VIII (Medicinal Chemistry)

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) Explain various theories of receptors. | 06 |
| | (b) What is CYP450? Give its function and important. | 05 |
| | (c) Which factors are affecting on drug receptor interaction? Briefly explain. | 05 |
| Q.2 | (a) Which are the major pathways of metabolism? Explain phase-I reactions in detail. | 06 |
| | (b) Give the synthesis of adrenaline and amphetamine with its mode of action. | 05 |
| | (c) Write a note on Antiparkinson's agent. | 05 |
| Q.3 | (a) What are sympathomimetics? Classify them with examples. | 06 |
| | (b) Write a note on antigout agents. | 05 |
| | (c) Define Cognition enhancers and its importance. | 05 |
| Q.4 | (a) Give the synthesis of any any three drugs :
(i) Dopamine (ii) Naphazoline (iii) Salbutamol (iv) Pethidine | 06 |
| | (b) Write a note on Alzheimer's disease. | 05 |
| | (c) Define opiod analgesic and write SAR on Morphine. | 05 |
| Q.5 | (a) What is antidepressant? Give SAR of tricyclic antidepressants. | 06 |
| | (b) Briefly explain role of Neuromuscular blocking and ganglionic blockers. | 05 |
| | (c) Write synthesis of any two :
(i) Nikethamine (ii) Imipramine (iii) Amitriptyllin | 05 |
| Q. 6 | (a) What are general anesthetics? Give SAR of local anesthetics. | 06 |
| | (b) Define Sedative and Hypnotic agents. Classify with suitable examples. | 05 |
| | (c) Write a note on DMARDs. | 05 |
| Q.7 | (a) Give chemical classification of Antipsychotics and discuss SAR of phenothiazine. | 06 |
| | (b) Write a SAR on Benzodiazepines. | 05 |
| | (c) Define and classify NSAIDs. Give the synthesis of Diclofenac sodium. | 05 |
