

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.**

- 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 : **06**
(i) Dopamine (ii) Naphazoline (iii) Salbutamol (iv) Pethidine
(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 : **05**
(i) Nikethamine (ii) Imipramine (iii) Amitriptyllin
- 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**
