

GUJARAT TECHNOLOGICAL UNIVERSITY**B.PHARM. - SEMESTER- VI • EXAMINATION – SUMMER-2016****Subject Code: 260004****Date:07/05/2016****Subject Name: Pharmaceutical Chemistry – VIII (Medicinal Chemistry)****Time: 10:30 AM to 1:30 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) | Define with example.1)Thymoleptics 2)Optical isomerism 3)Hydrolytic reactions 4)Mono amino oxidase (MAO) inhibitors 5) Xenobiotic metabolism 6) Alzheimers disease. | 06 |
| | (b) | Explain Induced fit theory and Occupational theory of receptors along with Equilibrium equations. | 05 |
| | (c) | Explain Phase-I metabolic Bio-transformation with example. | 05 |
| Q.2 | (a) | Explain SAR for Antimuscarinic Agents with suitable examples. | 06 |
| | (b) | Give synthesis of any two of the following 1) Ephedrine 2) Dicyclomine HCL 3) Dopamine | 05 |
| | (c) | Write a short note on Cholinergic receptors | 05 |
| Q.3 | (a) | Explain mode of action, classification and SAR for Analeptics with suitable example | 06 |
| | (b) | Give structure and use of the following (any 5) 1) Amitriptyline 2) Salbutamol 3) Methadone 4) Indomethacin 5) carbamazepine 6) Mefenamic acid | 05 |
| | (c) | Give synthetic scheme of any 2 of the following 1) Lignocaine 2) Allopurinol 3) Thiopental sodium | 05 |
| Q.4 | (a) | Explain mode of action & detail chemistry about Phenylethanolamine derivatives. | 06 |
| | (b) | Explain & classify Adrenoceptors. | 05 |
| | (c) | Explain factors affecting drug metabolism. | 05 |
| Q.5 | (a) | Elaborate SAR of barbiturates and explain role of phenothiazines as CNS depressants | 06 |
| | (b) | Classify and write a short note on Antipsychotics. | 05 |
| | (c) | Give mode of action of Anxiolytics and Antiepileptic drugs. | 05 |
| Q. 6 | (a) | Explain MOA, Classification & Chemistry of Anti-Gout & Dmards. | 06 |
| | (b) | Discuss in detail Cognition enhancers. | 05 |
| | (c) | Define COX-I & COX-II inhibitors and give the structure of various COX-II inhibitors with its toxicity. | 05 |
| Q.7 | (a) | Explain & classify Neuromuscular blocking agents and ganglionic blockers. | 06 |
| | (b) | Explain MOA & SAR of Antiparkinson's agents. | 05 |
| | (c) | Explain synthesis of Ibuprofen & Diclofenac. | 05 |
