

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Pharm - SEMESTER-V- (NEW SYLLABUS) EXAMINATION – SUMMER-2015

Subject Code: 2250004

Date: 04/05/2015

Subject Name: Pharmaceutical Chemistry VII (Medicinal Chemistry I)

Time: 2:30 pm to 5:30 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) | Write a note on Partition coefficient and Ionization that affect biological activity. | 06 |
| | (b) | What is Medicinal Chemistry? Give importance of Medicinal chemistry in drug discovery. | 05 |
| | (c) | Write a short note on Bioisosterism. | 05 |
| Q.2 | (a) | How Isomerism affect the biological activity. | 06 |
| | (b) | What is asthma? Explain antiasthmatics in detail. | 05 |
| | (c) | Write a short note on Expectorants and Antitussives. | 05 |
| Q.3 | (a) | Discuss SAR of antihistamines. | 06 |
| | (b) | Explain eicosanoids approved for human clinical use. | 05 |
| | (c) | Write a short note on H ₂ -receptor antagonist | 05 |
| Q.4 | (a) | Write a note on Diagnostic agents. | 06 |
| | (b) | Give SAR of cholinesterases (Parasympathomimetics). | 05 |
| | (c) | Write a short note on Neuromuscular Junction Blockers. | 05 |
| Q.5 | (a) | Give classification of Parasympatholytics with suitable examples. | 06 |
| | (b) | Write IUPAC name and synthesis of Cyproheptadine and Chlorpheniramine. | 05 |
| | (c) | Write a short note on Proton pump inhibitors. | 05 |
| Q. 6 | (a) | Give SAR of Beta-blockers. | 06 |
| | (b) | Write a note on Prokinetics and laxatives. | 05 |
| | (c) | Give IUPAC name and synthesis of Dicyclomine HCl and Atenolol. | 05 |
| Q.7 | (a) | Give classification of Sympathomimetics with suitable examples. | 06 |
| | (b) | Write IUPAC name and synthesis of Omeprazole and Ranitidine. | 05 |
| | (c) | Write Neurochemistry of Acetylcholine. | 05 |
