

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm - SEMESTER-V • EXAMINATION – SUMMER 2017

Subject Code: 2250004

Date: 08/06/2017

Subject Name: Pharmaceutical Chemistry VII (Medicinal Chemistry-I)

Time: 10:30 AM to 01:30 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) | What is Medicinal Chemistry? Give importance of Medicinal chemist in drug development. | 06 |
| | (b) | What is bioisosterism? Explain in detail with examples. | 05 |
| | (c) | How stereochemistry affects biological action of drugs. | 05 |
| Q.2 | (a) | Write a note on Partition coefficient and Ionization that affect biological activity. | 06 |
| | (b) | Write a short note on Antitussives. | 05 |
| | (c) | Write Chemical name and synthesis of Salbutamol and diatriazoic acid. | 05 |
| Q.3 | (a) | What is asthma? Explain antiasthmatics in detail. | 06 |
| | (b) | Give a note on radiological contrast media. | 05 |
| | (c) | Discuss chemistry and biosynthesis of histamine. | 05 |
| Q.4 | (a) | Give SAR of antihistaminic agents. | 06 |
| | (b) | Give chemical name and synthesis of diphenhydramine and cetirizine. | 05 |
| | (c) | Explain eicosanoids approved for human clinical use. | 05 |
| Q.5 | (a) | What are proton pumps Inhibitors? Explain its mechanism of action. Give Synthesis of Omeprazole. | 06 |
| | (b) | Write a note on Prokinetics and laxatives. | 05 |
| | (c) | Write a note on Antiemetics and antidiarrheals. | 05 |
| Q. 6 | (a) | Give SAR of cholineesters (Parasympathomimetics). | 06 |
| | (b) | Write a note on Neuromuscular Junction blockers. | 05 |
| | (c) | Classify Muscarinic antagonists with suitable examples. | 05 |
| Q.7 | (a) | Write SAR of β -Phenylethanolamine. | 06 |
| | (b) | Give Chemical name and synthesis of Dicyclomine HCl and Atenolol | 05 |
| | (c) | Write a note on β -blockers. | 05 |
