

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM. - SEMESTER- V • EXAMINATION – SUMMER-2016

Subject Code: 250004

Date:06/05/2016

Subject Name: Pharmaceutical Chemistry –VI (Medicinal)

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.

- | | | | |
|-------------|-----|---|-----------|
| Q.1 | (a) | Enlist various physicochemical parameters. Explain complexation and protein binding properties in detail. | 06 |
| | (b) | What is Bioisosterism? Classify and Explain in brief with examples. | 05 |
| | (c) | Write a note on Development of Medicinal Chemistry. | 05 |
| Q.2 | (a) | What are autocoids? Classify classical antihistamine with structure and add a note on histamine receptors. | 06 |
| | (b) | Give the structure of following
1) Loratidine 2) Cetrizine 3) Lansoprazole 4) Cyproheptadine
5) Ranitidine | 05 |
| | (c) | Give synthesis and use of Promethazine and Chlorcyclizine. | 05 |
| Q.3 | (a) | What are Eicosanoids? Give nomenclature, SAR and uses of eicosanoids. | 06 |
| | (b) | Give synthesis and use of Diphenoxylate and Atenolol. | 05 |
| | (c) | Write a note on Diagnostic agents. | 05 |
| Q.4 | (a) | Explain fischer's indole synthesis with reaction mechanism. | 06 |
| | (b) | Explain the following with reaction mechanism
(1) Skraup synthesis (2) Paalknorr synthesis | 05 |
| | (c) | Give two reaction of thiophene, quinoline. | 05 |
| Q.5 | (a) | Give the synthesis and reaction of pyrimidine and isoquinoline. | 06 |
| | (b) | Write a short note on proton pump inhibitors. | 05 |
| | (c) | Write a note on ferguson's principle. | 05 |
| Q. 6 | (a) | What is peptic ulcer? How it develops? classify the drugs used for the treatment of the PUD with their structure. | 06 |
| | (b) | What is antidiarrhoeal agents? classify and explain antidiarrhoeal agents with examples. | 05 |
| | (c) | Write a note on Drug modifying intestinal motility. | 05 |
| Q.7 | (a) | What is antitussive agents? Classify and explain antitussive agents with examples. | 06 |
| | (b) | Explain SAR studies of Antisecretary agents. | 05 |
| | (c) | Write a note on Antiasthmatics agent and Respiratory stimulants. | 05 |
