

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.

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| 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 | 05 |
| | 1) Loratidine 2) Cetrizine 3) Lansoprazole 4) Cyproheptadine | |
| | 5) Ranitidine | |
| | (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 | 05 |
| | (1) Skraup synthesis (2) Paalknorr synthesis | |
| | (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 |
