

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 **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 are antidiarrhoeal agents? Classify and explain antidiarrhoeal agents with examples. **05**
(c) Write a note on Drug modifying intestinal motility. **05**
- Q.7** (a) What are antitussive agents? Classify and explain antitussive agents with examples. **06**
(b) Explain SAR studies of Antisecretory agents. **05**
(c) Write a note on Antiasthmatics agent and Respiratory stimulants. **05**
