

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 5 EXAMINATION – SUMMER -2020

Subject Code: 2250004**Date: 28-10-2020****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.

- Q.1** (a) List out various physicochemical parameters. How hydrogen bonding and partition coefficient affects biological activity of drug. **06**
(b) Write a detailed note on bioisosterism with suitable examples. **05**
(c) State and explain Ferguson principle. **05**
- Q.2** (a) What is AChEIs? Describe mechanism of irreversible AChEIs with aging process. **06**
(b) Explain neuro muscular blocking agents in detail. **05**
(c) Give SAR of phenyl ethanolamine class of drugs. **05**
- Q.3** (a) Explain the following terms with suitable examples: **06**
1. Mucolytics 2. IBS 3. Antacids
(b) What is prokinetic agent? Explain it in detail with examples and mechanism of action. **05**
(c) Write a note on following: **05**
1. Anti-emetics 2. Expectorants
- Q.4** (a) What is peptic ulcer? Give a brief note on H₂-antagonists. **06**
(b) Give classification of H₁-antagonists. **05**
(c) Write a note on laxatives and anti-tussive agents. **05**
- Q.5** (a) What are anti-asthmatics? Classify it with examples and give its mechanism of action. **06**
(b) Describe proton pump inhibitors with mechanism of action. **05**
(c) Write synthetic procedure and uses of following: **05**
1. Diatriazoic acid 2. Omeprazole
- Q. 6** (a) What are eicosanoids? Describe its biosynthesis. **06**
(b) Write a note on eicosanoids approved for human clinical use. **05**
(c) Give synthesis and uses of following: **05**
1. Cetrizine 2. Ranitidine
- Q.7** (a) What are diagnostic agents? Give a detail note on radiopharmaceuticals. **06**
(b) Give SAR of cholinomimetics and synthesis of diphenhydramine. **05**
(c) What is medicinal chemistry? Write a note on history of medicinal chemistry. **05**
