

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 5 EXAMINATION – SUMMER -2019

Subject Code: 2250004**Date: 03-06-2019****Subject Name: Pharmaceutical Chemistry – VII (Medicinal Chemistry - I)****Time: 02:30 PM TO 05:30 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) Discuss the following physicochemical parameters in relation to biological activity **06**
(i) Protein binding (ii) Solubility
- (b) Write briefly about Bioisosterism. **05**
- (c) Explain how optical isomerism affects drug action. **05**
- Q.2** (a) Define expectorants, Antitussives and respiratory stimulants with examples. **06**
- (b) Explain antiasthmatics in detail. **05**
- (c) Write short notes on Prokinetics. **05**
- Q.3** (a) Discuss Antisecretory agents and proton pump inhibitors. **06**
- (b) Give IUPAC name and synthesis of the following drugs : **05**
(i) Ranitidine (ii) Omeprazole
- (c) Explain the followings with examples : **05**
(i) Antispasmodics (ii) Drugs for IBS
- Q.4** (a) Write IUPAC name and synthetic routes of the following drugs : **06**
(i) Chlorthalidone (ii) Promethazine
(iii) Cyproheptadine
- (b) What are H₁ receptor antagonists. Classify them with examples. **05**
- (c) What are eicosanoids ? Write briefly about biosynthesis of Prostaglandins. **05**
- Q.5** (a) Write short notes on Radiopharmaceuticals as diagnostic agents. **06**
- (b) Write ideal properties of Antacids. **05**
- (c) Write in detail about Antidiarrheal agents. **05**
- Q.6** (a) Write SAR of muscarinic antagonists. **06**
- (b) Explain Neuromuscular blocking agents. **05**
- (c) Write short notes on **05**
(i) β - blockers (ii) Hydrogen bonding and drug action
- Q.7** (a) Write IUPAC name and synthesis of **06**
(i) Propranolol (ii) Adrenaline
(ii) Diatrizoic acid
- (b) Give SAR of Parasympathomimetics. **05**
- (c) Write short notes on antiemetics. **05**
