

Seat No.: _____

Enrolment No. _____

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

Subject Code: 2250004**Date: 22-11-2019****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) Explain effect of ionization and partition coefficient on biological activity of drug molecule. **06**
(b) Define diagnostic agent. Write a note on Radiological Contrast Media. **05**
(c) Define medicinal chemistry. Write a note on history of medicinal chemistry. **05**
- Q.2** (a) Define asthma. Describe antiasthmatic agents in detail. **06**
(b) Explain bioisosterism in detail with examples. **05**
(c) Give synthesis, uses and IUPAC name of Ranitidine and Cetrizine. **05**
- Q.3** (a) Write note on: (1) Complexation (2) Hydrogen bonding **06**
(b) Write detail note on proton pump inhibitors. **05**
(c) Define autocoid. Explain biosynthesis of eicosanoids. **05**
- Q.4** (a) Write synthesis of (1) Dicyclomine (2) Salbutamol (3) Omeprazole **06**
(b) Describe SAR of β -phenylethanolamine of sympathomimetic agents. **05**
(c) Define neuromuscular blocker. Explain SAR of muscarinic antagonist. **05**
- Q.5** (a) Explain following terms with examples: **06**
(1) Expectorant (2) Antidiarrheal agent (3) Mucolytic
(b) Define nasal decongestant. Write note on antitussive agents. **05**
(c) Write detail note on ganglion blockers. **05**
- Q. 6** (a) Explain following terms with examples: **06**
(1) Prokinetic (2) Antiemetic (3) Antispasmodic
(b) Define and classify antacid and laxative. **05**
(c) Define and classify sympatholytic agent. **05**
- Q.7** (a) Give synthesis of followings: **06**
(1) Chlorpheniramine (2) Promethazine (3) Atenolol
(b) What are eicosanoids? Differentiate H_1 and H_2 antagonist. **05**
(c) Answer the followings: (1) Chemistry of histamine **05**
(2) Drug action mediated by eicosanoids
