

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph. - SEMESTER- V • EXAMINATION – WINTER -2020**Subject Code: 2250004****Date: 11/01/2021****Subject Name: Pharmaceutical Chemistry - VII****Time: 10:30AM TO 12:30PM****Total Marks: 54****Instructions:**

1. Attempt any **THREE** questions from Q-1 to Q-6.
2. Q.7 is compulsory to attempt.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.

- Q.1** (a) Define and classify diagnostic agents. Explain in detail positive contrast media. **06**
(b) Write a note on neuromuscular blocking agents. **05**
(c) Discuss in detail SAR of H₂ receptor blockers. **05**
- Q.2** (a) Give the IUPAC name and synthesis of following compound: **06**
a) Propranolol b) Diatriazoic acid
(b) What is Medicinal Chemistry? Describe importance of Medicinal chemistry in drug discovery. **05**
(c) Discuss in detail drugs for irritable bowel syndrome. **05**
- Q.3** (a) Enlist various physicochemical parameters. How partition coefficient and ionization affects biological activity of drug. **06**
(b) Explain in detail SAR of muscarinic antagonists. **05**
(c) Give the structure and IUPAC name of following compounds: **05**
a) Atenolol b) Dicyclomine HCl c) Chlorpheniramine d) Promethazine
e) Salbutamol
- Q.4** (a) Define asthma. Classify the drugs used in treatment of asthma with suitable example. Discuss bronchodilators in detail. **06**
(b) Give the synthesis of a) Adrenaline b) Promethazine **05**
(c) Write a Short note on Mucolytic agents. **05**
- Q.5** (a) Explain in detail Cyclooxygenase pathway. **06**
(b) Explain Laxatives. Classify them with suitable example along with structure. **05**
(c) Define Drug Therapy. Write a note on history of medicinal chemistry **05**
- Q. 6** (a) What is Phase – I metabolism? Discuss in detail Oxidative biotransformation. **06**
(b) Write a note on Prokinetics. **05**
(c) Discuss SAR of Parasympathomimetics. **05**
- Q.7** (a) Write a short note on : a) Decongestants b) Respiratory Stimulants **06**
OR
(a) Discuss in depth eicosanoids approved for human clinical use. **06**
OR
(a) Give the synthesis of Cetrizine and Neostigmine. **06**
