

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.Pharm. - SEMESTER-IV • EXAMINATION – SUMMER - 2018**

**Subject Code: 240005**
**Date: 21/05/2018**
**Subject Name: Pharmacology-I**
**Time: 10:30 AM TO 01:30 PM**
**Total Marks: 80**
**Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- |            |  |           |
|------------|--|-----------|
| <b>Q.1</b> | (a) Classify various routes of drug administration and write advantages and disadvantages of parenteral route.   | <b>06</b> |
|            | (b) Describe steps involving in neurohumoral transmission.   | <b>05</b> |
|            | (c) Define following term:<br>i) Pharmacodynamic   ii) Pharmacogenomics   iii) Pharmacokinetics<br>iv) Drug tolerance      v) Teratogenicity               | <b>05</b> |
| <b>Q.2</b> | (a) Discuss absorption process and factors affecting to drug absorption.   | <b>06</b> |
|            | (b) What is Dale's vasomotor reversal of adrenaline and classify sympathomimetic agents.   | <b>05</b> |
|            | (c) Explain competitive and non-competitive antagonism with suitable example.  | <b>05</b> |
| <b>Q.3</b> | (a) Write a short note on:<br>(1) Method prolonging the duration of action of drug<br>(2) Plasma protein binding.  | <b>06</b> |
|            | (b) Enlist various types of receptor and describe GPCR in detail.  | <b>05</b> |
|            | (c) Classify cholinergic drugs and write down pharmacological action of acetylcholine.   | <b>05</b> |
| <b>Q.4</b> | (a) Write a short note on:<br>1) Structure activity relationship(SAR)<br>2) First pass metabolism<br>3) Bioavailability                                    | <b>06</b> |
|            | (b) Enlist various types of drug interactions. Write in detail about pharmacokinetic drug interaction.   | <b>05</b> |
|            | (c) Define autocoids. Write short note on H <sub>1</sub> receptor blocker.   | <b>05</b> |
| <b>Q.5</b> | (a) Write down pharmacological action of histamine.  | <b>06</b> |
|            | (b) Write a note on prostaglandins.  | <b>05</b> |
|            | (c) Write phases of clinical trial.  | <b>05</b> |
| <b>Q.6</b> | (a) Explain organophosphorous poisoning and its treatment.   | <b>06</b> |
|            | (b) Write a note on pentagastrin and angiotensin.  | <b>05</b> |
|            | (c) Write a note on local anaesthetics.  | <b>05</b> |
| <b>Q.7</b> | (a) Write a note on drug nomenclature and Define drug and explain different sources  | <b>06</b> |
|            | (b) Write a note on neuro muscular blocking agents.  | <b>05</b> |
|            | (c) Define following terms with example<br>i) Potentiation          ii) Addition          iii) Synergism<br>iv) Agonist              v) Partial antagonist | <b>05</b> |