

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 4 EXAMINATION – WINTER -2019

Subject Code: 2240005**Date: 16-12-2019****Subject Name: Basic Concepts of Pharmacology and Clinical Pharmacy Practice****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) Define bioavailability. Explain single dose and multiple dose bioavailability. **06**
(b) Discuss the scope of pharmacology and clinical pharmacy. **05**
(c) Write a note on various sources of drugs. **05**
- Q.2** (a) Write in detail on G-protein coupled receptors. **06**
(b) Define therapeutic drug monitoring and explain its significance. **05**
(c) Write a note on Essential drugs. **05**
- Q.3** (a) Write a note on various routes of administration of drug. **06**
(b) Explain the dose response relationship. **05**
(c) What are the various considerations for drug prescribing during pregnancy? **05**
- Q.4** (a) Write in brief how pharmacokinetic factors affect the dose selection in pediatric patient. **06**
(b) Define antagonist. Differentiate competitive and non-competitive antagonism. **05**
(c) Define following terms: **05**
1. Poison
2. Receptor
3. Agonist
4. Chemotherapy
5. Pharmacoepidemiology
- Q.5** (a) Define pharmacokinetics and explain factors affecting drug absorption. **06**
(b) Write a note on medication errors. **05**
(c) Write a note on medication non-adherence. **05**
- Q.6** (a) Explain in brief adverse drug reactions. Classify ADRs as per Rawlins Thompson system with suitable example. **06**
(b) Write a note on drug information centre. **05**
(c) Discuss pharmacokinetic drug interaction with suitable examples. **05**
- Q.7** (a) Write a short note on **06**
1. Plasma protein binding
2. Significance of Phase I and Phase II metabolism.
(b) Explain in detail about Medication adherence and non-adherence. **05**
(c) Define the following: **05**
1. Synergism
2. Potentiation
3. Drug tolerance
4. Half life
5. Pharmacogenetics