

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm- SEMESTER IV EXAMINATION – SUMMER - 2018**Subject Code:2240005****Date: 14/05/2018****Subject Name: Basic Concepts of Pharmacology and Clinical Pharmacy Practice****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.

- Q.1** (a) Classify various routes of administration. Write merits and demerits of intravenous route. **06**
(b) Explain dose response relationship. **05**
(c) Define volume of distribution and explain factors affecting drug distribution. **05**
- Q.2** (a) Write in detail on G-protein coupled receptors. **06**
(b) Explain various sources of drugs. **05**
(c) Differentiate competitive and non-competitive antagonism. **05**
- Q.3** (a) Define pharmacokinetics and explain factors affecting drug absorption. **06**
(b) Write a note on Plasma protein binding. **05**
(c) Explain following terms: **05**
(1) Bioavailability
(2) Receptor
(3) Agonist
(4) Clinical Pharmacy
(5) Pharmacoepidemiology
- Q.4** (a) Write a note on Kinase linked receptors. **06**
(b) Write a note on medication errors. **05**
(c) Discuss pharmacokinetic drug interaction with suitable examples. **05**
- Q.5** (a) Explain in details on transportation mechanisms of drug across biological membrane. **06**
(b) Write a note on adverse drug reaction. **05**
(c) Define the following: **05**
(1) Synergism
(2) Potentiation
(3) Drug tolerance
(4) Half life
(5) Pharmacogenetics
- Q. 6** (a) Define biotransformation. Explain mixed function oxidase system for drug metabolism. **06**
(b) Discuss about pharmacokinetic changes in drug therapy in elderly patients. **05**
(c) Write a short not on Blood brain barrier. **05**
- Q.7** (a) Write a note on Therapeutic drug monitoring and its significance. **06**
(b) Describe communication skills for patient counseling. **05**
(c) Explain in brief the rationale use of drug. **05**
