

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – IV • EXAMINATION – WINTER • 2015

Subject Code: 2240005**Date: 11-01-2016****Subject Name: Basic Concepts of Pharmacology and
Clinical Pharmacy Practice****Time: 02:30 pm - 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 drug and explain different sources of drugs. **06**
(b) Write a short note on: (1) Bioequivalence (2) Plasma protein binding **05**
(c) Classify various routes of administration and write merits and demerits of intravenous route. **05**
- Q.2** (a) Explain the factors affecting the absorption of drugs. **06**
(b) Write a note on “Mixed function oxidases” involved in Biotransformation. **05**
(c) Write a note on therapeutic drug monitoring. **05**
- Q.3** (a) Define apparent volume of distribution. Explain the factors which affect the drug distribution. **06**
(b) Define bioavailability. Explain the term of biological half life and give its importance. **05**
(c) Discuss area under curve for single and repeated dose. **05**
- Q.4** (a) Explain various factors modifying drug action. **06**
(b) Explain dose response relationship. **05**
(c) Discuss about dose adjustment required in children and elderly patients. **05**
- Q.5** (a) Explain signal transduction mechanism of G-protein coupled receptors. **06**
(b) Differentiate competitive and non-competitive antagonism with suitable examples. **05**
(c) Discuss about pharmacokinetic changes in drug therapy during pregnancy. **05**
- Q. 6** (a) Define drug interactions. Explain the pharmacokinetic drug interactions. **06**
(b) Write a detailed note on medication errors. **05**
(c) Define essential medicines. What are the criteria for selection of essential drugs? **05**
- Q.7** (a) Classify ADRs as per Rawlins-Thompson system with suitable example. **06**
(b) Write a note on detection of adverse drug reactions. **05**
(c) Describe various communication skills for effective patient counseling. **05**
