

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – IV • EXAMINATION – SUMMER • 2014

Subject Code: 240005

Date: 23-05-2014

Subject Name: Pharmacology-I

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) Enumerate routes of drug administration. Give the merits and demerits of intravenous route of drug administration. **06**
- (b) Explain signal transduction mechanism of G-protein coupled receptors. **05**
- (c) Explain drug tolerance and dependence. **05**
- Q.2** (a) Give merits of prolongation of drug action. Explain various methods used to prolong the duration of action of drug. **06**
- (b) Explain drug antagonism. Give difference between competitive and non-competitive antagonism with suitable examples. **05**
- (c) Briefly explain various types of animal toxicity studies. **05**
- Q.3** (a) Explain the following terms (any two): **06**
- I. Plasma protein binding
- II. Bioavailability
- III. First pass metabolism
- (b) Define drug and explain different sources of drugs. **05**
- (c) Enumerate various reactions involved in metabolism. Write a short note on microsomal enzyme induction. **05**
- Q.4** (a) Explain the following terms: **06**
- I. Teratogenicity
- II. Structure activity relationship
- (b) Write a short note on clinical trials. **05**
- (c) Write a short note on local anesthetics. **05**
- Q.5** (a) Classify muscarinic and nicotinic receptors with subtypes and explain pharmacological action of Acetylcholine. **06**
- (b) Give difference between non depolarizing agents and depolarizing agents as neuromuscular blockers. **05**
- (c) Write a short note on drugs acting on autonomic ganglia. **05**
- Q. 6** (a) Write a short note on neurohumoral transmission. **06**
- (b) Explain in detail about anticholinesterase poisoning and its treatment. **05**
- (c) Classify sympathomimetic drugs. **05**
- Q.7** (a) Give the pharmacological actions of histamine. **06**
- (b) Write a note on prostaglandins. **05**
- (c) Write pharmacology of angiotensin. **05**
