

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): I. Plasma protein binding II. Bioavailability III. First pass metabolism	06
	(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: I. Teratogenicity II. Structure activity relationship	06
	(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
