

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

Subject Code: 240005**Date: 15-05-2019****Subject Name: Pharmacology - I****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) Explain the following terms: **06**
i. Teratogenicity
ii. Structure activity relationship
- (b) Write a short note on local anesthetics. **05**
- (c) Describe the pharmacological and physiological role of serotonin. **05**
- Q.2** (a) Explain Dose response relationship and its importance. **06**
- (b) Briefly explain various types of animal toxicity studies. **05**
- (c) Classify sympathomimetic drugs. **05**
- Q.3** (a) Define biotransformation. Describe enzyme induction and enzyme inhibition with examples. **06**
- (b) Explain signal transduction mechanism of G-protein coupled receptors. **05**
- (c) Explain in detail about anticholinesterase poisoning and its treatment. **05**
- Q.4** (a) Enumerate routes of drug administration. Give the merits and demerits of intravenous route of drug administration. **06**
- (b) Explain drug antagonism. Give difference between competitive and non-competitive antagonism with suitable examples **05**
- (c) Write a short note on drugs acting on autonomic ganglia. **05**
- Q.5** (a) Describe in short on the following **06**
i. Prostaglandins
ii. Histamine
- (b) Give difference between non depolarizing agents and depolarizing agents as neuromuscular blockers. **05**
- (c) Explain plasma protein binding of drugs and its clinically significant implications with suitable examples. **05**
- Q.6** (a) Classify muscarinic and nicotinic receptors with subtypes and explain pharmacological action of Acetylcholine. **06**
- (b) Define drug and explain different sources of drugs **05**
- (c) Write a short note on bioavailability **05**
- Q.7** (a) Write a short note on neurohumoral transmission. **06**
- (b) Explain drug tolerance and dependence. **05**
- (c) Write a short note on phases of clinical trials. **05**
