

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.

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|-------------|------------|--|-----------|
| 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 |
