

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

Subject Code: 240005

Date: 11-01-2016

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.**

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|-------------|--|-----------|
| Q.1 | (a) Write a note on G-protein coupled receptors. | 06 |
| | (b) Discuss the advantages and disadvantages of intravenous route of drug administration. | 05 |
| | (c) Write a short note on phases of clinical trials. | 05 |
| Q.2 | (a) Write a note on sources of drugs. | 06 |
| | (b) Differentiate competitive and non-competitive antagonism. | 05 |
| | (c) Differentiate sympathetic and parasympathetic nervous system. | 05 |
| Q.3 | (a) Describe the mechanism of action of local anesthetics. | 06 |
| | (b) Differentiate Autonomic and Somatic nervous system. | 05 |
| | (c) Write a short note on Structure activity relationship. | 05 |
| Q.4 | (a) Define biotransformation. Describe enzyme induction and enzyme inhibition with examples. | 06 |
| | (b) Write a short note on pharmacokinetic drug interactions. | 05 |
| | (c) Write a short note on acute toxicity studies. | 05 |
| Q.5 | (a) Write a note on Adverse drug reactions. | 06 |
| | (b) Classify beta blockers. Write a short note on Atenolol. | 05 |
| | (c) Describe methods for prolonging duration of action of drug. | 05 |
| Q. 6 | (a) Describe synthesis, release and metabolism of Adrenaline. | 06 |
| | (b) Define receptors, classify cholinergic receptors, describe their distribution and give examples of their agonists and antagonists. | 05 |
| | (c) Write a short note on triple response of histamine. | 05 |
| Q.7 | (a) Classify autocoids and discuss the pharmacology of prostaglandins. | 06 |
| | (b) Classify neuromuscular blocking agents. Write a note on D-tubocuarine. | 05 |
| | (c) Discuss the factors affecting absorption of drug from gut. | 05 |
