

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B. PHARM. - SEMESTER – IV • EXAMINATION – WINTER 2012**

**Subject code: 240005****Date: 03/01/2013****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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|------------|--|-----------|
| <b>Q.1</b> | (a) Enlist basic processes involved in pharmacokinetics. Explain various factors affecting biotransformation of drugs. | <b>06</b> |
|            | (b) Discuss advantages and disadvantages of local route of administration.   | <b>05</b> |
|            | (c) Write a note on active transport.  | <b>05</b> |
| <b>Q.2</b> | (a) Classify parasympathomimetics. Write M/A and therapeutic uses of Ach.  | <b>06</b> |
|            | (b) Explain various factors modifying drug action.   | <b>05</b> |
|            | (c) Discuss the importance of SAR.   | <b>05</b> |
| <b>Q.3</b> | (a) Explain various processes of excretion of drugs by kidney.   | <b>06</b> |
|            | (b) Explain bioavailability and its significance.  | <b>05</b> |
|            | (c) Write a note on apparent volume of distribution.   | <b>05</b> |
| <b>Q.4</b> | (a) Enlist various types of drug interactions. Write in detail on pharmacokinetic drug interaction.                    | <b>06</b> |
|            | (b) Write pharmacological actions of atropine and symptoms of its poisoning.   | <b>05</b> |
|            | (c) Explain Dales' vasomotor reversal phenomenon.  | <b>05</b> |
| <b>Q.5</b> | (a) Enlist types of receptors. Write on G-protein coupled receptor.  | <b>06</b> |
|            | (b) Dwell upon animal toxicity tests in detail.  | <b>05</b> |
|            | (c) Write therapeutic uses of propranolol.   | <b>05</b> |
| <b>Q.6</b> | (a) Classify neuromuscular blockers. Write on M/A and uses of d-tubocurarine.  | <b>06</b> |
|            | (b) Enlist autocooids. Write pharmacological actions of 5-HT.  | <b>05</b> |
|            | (c) Write a note on adverse drug reactions.  | <b>05</b> |
| <b>Q.7</b> | (a) Classify local anaesthetics. Write their characteristics and mechanism of actions.                                 | <b>06</b> |
|            | (b) Write therapeutic uses and side effects of alpha-adrenergic blockers.  | <b>05</b> |
|            | (c) Write a note on prostaglandins.  | <b>05</b> |

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