

**GUJARAT TECHNOLOGICAL UNIVERSITY****B. Pharm. - SEMESTER-IV- EXAMINATION –SUMMER-2016****Subject code: 240005****Date: 03/06/2016****Subject Name: Pharmacology-I****Time: 10:30 AM to 1:30 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) Write short note on enzyme induction and enzyme inhibition.   | <b>06</b> |
|             | (b) Explain the effect of plasma protein binding on drug distribution.                                      | <b>05</b> |
|             | (c) Write a note on bioavailability and bioequivalence.   | <b>05</b> |
| <b>Q.2</b>  | (a) Describe pharmacology of prostaglandins.  | <b>06</b> |
|             | (b) Define autacoids. Write short note on H <sub>1</sub> receptor blocker.                                  | <b>05</b> |
|             | (c) Write short note on local anesthetics.  | <b>05</b> |
| <b>Q.3</b>  | (a) Define prodrug. Explain phase I and II biotransformation of drugs.                                      | <b>06</b> |
|             | (b) Write phases of clinical trials.  | <b>05</b> |
|             | (c) Write note on idiosyncratic drug reactions.   | <b>05</b> |
| <b>Q.4</b>  | (a) Classify sympatholytics. Write pharmacology of selective $\beta_1$ blockers.                            | <b>06</b> |
|             | (b) Explain organophosphorous poisoning and its treatment.  | <b>05</b> |
|             | (c) Write pharmacological actions and therapeutic uses of parasymphatholytics.                              | <b>05</b> |
| <b>Q.5</b>  | (a) Write a note on sympathetic transmission.   | <b>06</b> |
|             | (b) Write a note on neuromuscular blocking agents.  | <b>05</b> |
|             | (c) Classify sympathomimetics. Write pharmacology of selective $\beta$ receptor agonists.                   | <b>05</b> |
| <b>Q. 6</b> | (a) What is antagonism? Explain different types of antagonism.  | <b>06</b> |
|             | (b) What are the different routes of administration? Give advantages and disadvantages of parenteral route. | <b>05</b> |
|             | (c) Write a note on theories of drug receptor interaction.  | <b>05</b> |
| <b>Q. 7</b> | (a) Classify receptor with examples. Write a note on nuclear receptor.                                      | <b>06</b> |
|             | (b) Write a note on angiotensin.  | <b>05</b> |
|             | (c) Enumerate factors affecting drug absorption and explain effect of pH and ionization on drug absorption. | <b>05</b> |

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