Seat No.: _____ Enrolment No._____

# GUJARAT TECHNOLOGICAL UNIVERSITY

**B.PHARM – SEMESTER – 4- EXAMINATION –WINTER - 2018**

**Subject Code:240005** **Date: 10/12/2018**

**Subject Name: Pharmacology - I**

**Time:02:30 PM TO 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)** | Classify parasympathomimetics. Write M/A and therapeutic uses of Ach. | **06** |
| | **(b)** | Explain pharmacokinetic drug- drug interactions with examples. | **05** |
| | **(c)** | Write a note on enzyme induction and enzyme inhibition with examples. | **05** |
| **Q.2** | **(a)** | Classify beta blockers. Write a pharmacological action and uses of propranolol. | **06** |
| | **(b)** | Differentiate competitive and non-competitive antagonism. | **05** |
| | **(c)** | Explain drug tolerance and dependence. | **05** |
| **Q.3** | **(a)** | Classify serotonin receptors and describe its pharmacological actions. | **06** |
| | **(b)** | Write merits and demerits of intravenous route. | **05** |
| | **(c)** | Write different phases of clinical trials. | **05** |
| **Q.4** | **(a)** | Classify alpha-adrenoreceptor antagonist. Describe pharmacology of prazosin. | **06** |
| | **(b)** | Explain various factors modifying drug action. | **05** |
| | **(c)** | Describe mode of action and therapeutic uses of local anaesthetics. | **05** |
| **Q.5** | **(a)** | Classify antihistamines and give its pharmacological action and therapeutic uses. | **06** |
| | **(b)** | Write a note on apparent volume of distribution. | **05** |
| | **(c)** | Write a short note on acute and sub acute toxicity study. | **05** |
| **Q. 6** | **(a)** | Classify neuromuscular blockers. Write on M/A and uses of d-tubocurarine. | **06** |
| | **(b)** | Explain bioavailability and its significance. | **05** |
| | **(c)** | Write a note on organophosphorous poisoning. | **05** |
| **Q.7** | **(a)** | Write in brief the gating and signal transduction mechanisms of G-protein coupled receptors. | **06** |
| | **(b)** | Write a note on prostaglandins. | **05** |
| | **(c)** | Explain the term of biological half life and give its importance. | **05** |

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