

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.PHARM - SEMESTER- 4 EXAMINATION – WINTER -2019**

**Subject Code: 240005****Date: 19-12-2019****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.

- Q.1** (a) Enlist various routes of drug administration. Write merit and demerit of IV route. **06**  
(b) Classify local anaesthetic and write its mechanism of action. **05**  
(c) Write down pharmacological action of histamine. **05**
- Q.2** (a) Write down pharmacological action of prostaglandins. **06**  
(b) Write factors affecting to absorption of drug. **05**  
(c) Write a short note on leukotrienes and angiotensin. **05**
- Q.3** (a) Classify anticholinergic drugs and write pharmacological action of atropine. **06**  
(b) Write a note on beta blockers. **05**  
(c) Write a note on pentagastrin. **05**
- Q.4** (a) Explain following terms. **06**  
1) Pharmacokinetic 2) Pharmacodynamic 3) Drug dependence 4) Drug tolerance  
(b) What is adverse drug reaction? Write short note on it. **05**  
(c) Write a short note on various type of drug interaction. **05**
- Q.5** (a) Describe various phase of clinical trial. **06**  
(b) Explain dose response relation, drug synergism and drug addition. **05**  
(c) Write short note on structure relationship activity. **05**
- Q. 6** (a) Classify cholinergic drugs and write pharmacological action of acetylcholine. **06**  
(b) Describe source and nomenclature of drug. **05**  
(c) Classify beta adrenergic agents as per their mechanism of action. **05**
- Q.7** (a) Write steps involving in neuro-humoral transmission. **06**  
(b) Classify ganglion stimulant and ganglion blockers. **05**  
(c) Differentiate d-tubocurarine and succinylcholine. **05**

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