

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B. Pharm. – SEMESTER – IV • EXAMINATION – WINTER 2013**

**Subject Code: 240005****Date: 05-12-2013****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.

- Q.1** (a) Classify sympathomimetic drugs. Write pharmacological action, uses and adverse drug reaction of adrenaline. **06**  
(b) Explain Organophosphorous poisoning & its treatment. **05**  
(c) Write a note on enzyme induction and enzyme inhibition with examples. **05**
- Q.2** (a) Classify antihistamines and give its pharmacological action and therapeutic uses. **06**  
(b) Classify various routes of administration and write merits and demerits of intravenous route. **05**  
(c) Classify beta blockers. Write a pharmacological action and uses of propranolol. **05**
- Q.3** (a) Explain signal transduction mechanism of G-protein coupled receptors. **06**  
(b) Explain pharmacological actions and clinical uses of atropine. **05**  
(c) Write a short note on: **05**  
    1. Bioequivalence  
    2. Plasma protein binding
- Q.4** (a) Classify alpha-adrenoreceptor antagonist. Describe pharmacology of prazosin. **06**  
(b) Explain competitive and non-competitive antagonism. **05**  
(c) Define bioavailability. Explain the term of biological half life and give its importance. **05**
- Q.5** (a) Explain the factors affecting the absorption of drugs. **06**  
(b) Describe mode of action and therapeutic uses of local anaesthetics. **05**  
(c) Write a note on Ganglionic blockers. **05**
- Q.6** (a) Explain neurohumoral transmission. **06**  
(b) Write pharmacology and therapeutic uses of prostaglandin. **05**  
(c) Differentiate d-tubocurarine and succinylcholine. **05**
- Q.7** (a) Explain the following terms and give its importance in clinical trials of drugs: **06**  
    1. Therapeutic Index  
    2. Placebo  
(b) Classify 5-HT receptors. Discuss in detail about pharmacology of 5-HT. **05**  
(c) Write a short note on pentagastrin and substance P. **05**

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