

C. U. SHAH UNIVERSITY
External Theory Exam Summer-2015

Branch: **B. Pharm**

Semester: **IV**

Subject Code: **4PS04COL1**

Subject Name: **Pharmacology-I**

Instructions:

- i. **Q-1 and Q-4 are compulsory.**
- ii. **Make suitable assumptions wherever necessary.**
- iii. **Figures to the right indicate full marks.**

Section-I

Q-1. Answer the following questions: **[07]**

1. Define bioequivalence.
2. Explain first pass metabolism.
3. Define iatrogenic diseases.
4. Give some examples of drug food interactions.
5. Describe enzyme induction and enzyme inhibition.
6. Explain drug tolerance and dependence.
7. Enlist various sources of drugs.

Q-2. A. Explain factors affecting drug absorption. **[05]**

B. Discuss signal transduction mechanism of G-protein coupled receptor. **[05]**

C. Describe bioavailability and its significance. **[04]**

OR

Q-2. A. Enlist various reactions of metabolism. Write a note on Microsomal enzymes. **[05]**

B. Enlist type of drug antagonism and differentiate competitive and non-competitive antagonism. **[05]**

C. Describe biological half life and its significance. **[04]**

Q-3. A. Describe pharmacokinetic type of drug interactions. **[05]**

B. Write a note on phases of clinical trials. **[05]**

C. Explain apparent volume of distribution in detail. **[04]**

OR

Q-3. A. Write a note on different types of animal toxicity studies. **[05]**

B. Enlist various routes of administration and discuss merit and demerits of intravenous route. **[05]**

C. Explain dose response relationship and its importance. **[04]**

Section-II

- Q-4. Answer the following questions:** [07]
1. What is triple response?
 2. Explain Dale's vasomotor reversal.
 3. Why acetylcholine is not used therapeutically?
 4. Discuss Teratogenicity and Carcinogenicity.
 5. Enlist Ganglionic stimulants and its blockers.
 6. Write symptoms of atropine poisoning.
 7. Comment on "Local anesthetics often fail to afford adequate pain control in inflamed tissue.
- Q-5. A. Write a note on adrenergic transmission in detail.** [05]
B. Classify sympathomimetics. Discuss pharmacological actions of adrenaline. [05]
C. Describe organophosphorus poisoning and its treatment. [04]
- OR**
- Q-5. A. Classify parasympathomimetics. Write pharmacological actions of acetylcholine** [05]
B. Write a note on Prostaglandins. [05]
C. Differentiate depolarizing and non-depolarizing neuromuscular blockers. [04]
- Q-6. A. Classify Local anesthetics. Write their characteristics and mechanism of action.** [05]
B. Explain pharmacological actions of 5-HT. [05]
C. Describe therapeutic uses of propranolol. [04]
- OR**
- Q-6. A. Write therapeutic uses and side effects of alpha-adrenergic blockers.** [05]
B. Classify anti-histamines. Give its pharmacological actions and therapeutic uses. [05]
C. Write a note on pharmacology of angiotensin. [04]