Seat No.: _____ *Enrolment No._____*

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharmacy Sem-IV Remedial Examination Nov/Dec. 2010

Subject code: 240005 Subject Name: Pharmacology-I

Date: 09 / 12/ 2010 Time: 02.30 pm – 05.30 pm

Instructions: **Total Marks: 80**

1. **Attempt any five questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	(a)	Classify muscarinic receptors with subtypes and explain pharmacological action and clinical uses of Atropine.	**06**
	(b)	Classify Skeletal muscle relaxant and describe their toxicities.	**05**
	(c)	Give the advantages and disadvantages of intravenous route of drug administration and mention the precautionary measures of this route.	**05**
Q.2	(a)	Give pharmacological actions and uses of Adrenaline.	**06**
	(b)	Explain the importance of Structure Activity Relationship giving suitable examples.	**05**
	(c)	Give mechanism of action of the following drugs: 1. Procaine 2. Ranitidine	**05**
Q.3	(a)	Classify angiotensin receptors and explain the actions of angiotensin.	**06**
	(b)	Write in short on Combined effects of drugs.	**05**
	(c)	Describe pharmacological action of Prostaglandins.	**05**
Q.4	(a)	Write short note on **1.** Adrenergic neuron blockers **2.** Pharmacological actions and uses of propranolol	**06**
	(b)	Explain signal transduction mechanism of G-protein coupled receptors.	**05**
	(c)	Enlist and describe the drugs used in the treatment of glaucoma.	**05**
Q. 5	(a)	State whether the following statements are true or false, justify giving suitable explanation 1. Enzyme induction by drugs can be exploited therapeutically. 2. Phenoxybenzamine can be used during surgical removal of pheochromocytoma 3. Succinylcholine causes prolonged apnoea 4. Thymectomy helps improvement of the condition of patients with myasthenia gravis. 5. Local anesthetics often fail to afford adequate pain control in inflamed tissue. 6. Pralidoxime in used in the treatment of organophosphate compound poisoning	**06**

(b) Explain the following terms: **05**

1. Cauda equina syndrome
2. Pharmacodynamics
3. Iatrogenic disease
4. Drug action
5. Bioavailability

(c) Classify anticholinesterase agents, giving their mechanism of action and pharmacological actions. **05**

Q.6 (a) Give the pharmacological actions of histamine. **06**

(b) Explain drug interaction giving suitable examples of interaction that alter the object drug at its site of action by affecting its absorption, distribution, metabolism and excretion. **05**

(c) Answer the following in short: **05**

i. Define adverse drug reactions and differentiate between Type A and Type B adverse drug reactions.

ii. What practices should be followed to minimize adverse drug effects.

Q.7 (a) Write a short note on **06**

1. Plasma protein binding

2. Significance of Phase I and Phase II metabolism

(b) Enlist and explain various factors responsible for variation in dug response. **05**

(c) Briefly explain various types of animal toxicity studies. **05**

****