

GUJARAT TECHNOLOGICAL UNIVERSITY**B. Pharm. – SEMESTER – IV • EXAMINATION – WINTER • 2016****Subject Code: 240005****Date: 25-10-2016****Subject Name: Pharmacology-I****Time: 10:30 am - 01:30 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) Describe neurohumoral transmission through sympathetic nervous system. **06**
(b) Explain type B ADR with suitable examples. **05**
(c) Define, classify and give mechanism and action of local anesthetics. **05**
- Q.2** (a) Enlist type of receptors and describe kinase-linked receptors. **06**
(b) Give mechanism and action and therapeutic uses of physostigmine and clonidine. **05**
(c) Discuss nomenclature of drugs. **05**
- Q.3** (a) Explain following terms (Any 3) **06**
1. Pharmacotherapeutics 4. Pharmacovigilance
2. Pharmacometrics 5. Clinical Pharmacology
3. Pharmacogenetics
(b) Classify antihistaminic drugs with suitable examples. **05**
(c) Explain mechanism and action and therapeutic uses of cholinergic blocking agents. **05**
- Q.4** (a) Discuss preclinical vs clinical phase of drug development. **06**
(b) Give justification for use of following drugs in given disease condition (Any 2) **05**
1. Propranolol in treatment of hypertension.
2. Atropine in treatment of insecticide poisoning.
3. Phenoxybenzamine in treatment of pheochromocytoma.
(c) Classify ganglionic stimulants and blockers with suitable examples. **05**
- Q.5** (a) Explain significance of plasma protein binding (PPB). **06**
(b) Give mechanism and action and therapeutic uses of salbutamol and tamsulosin. **05**
(c) Explain agonist, partial agonist and inverse agonist with examples. **05**
- Q.6** (a) Differentiate pachycurares vs leptocurares. **06**
(b) Define drug interaction. Describe beneficial drug interactions and adverse drug interactions. **05**
(c) Give mechanism and action and therapeutic uses of sumatriptan and cetirizine. **05**

- Q.7** (a) Give comment on following sentences. (Any 3) **06**
1. Hepatic first pass metabolism reduces bioavailability of drugs.
 2. Parenteral route of drug administration has fast onset of action.
 3. Basic drugs are absorbed from the intestine.
 4. Acidic drugs are more readily excreted in basic urine.
- (b) Define autacoids and describe short note on pentagastrin. **05**
- (c) Write down a short note on drug tolerance. **05**
