

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**
