

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm. - SEMESTER-IV • EXAMINATION – SUMMER - 2018

Subject Code: 240005

Date: 21/05/2018

Subject Name: Pharmacology-I

Time: 10:30 AM TO 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) Classify various routes of drug administration and write advantages and disadvantages of parenteral route. **06**
 - (b) Describe steps involving in neurohumoral transmission. **05**
 - (c) Define following term: **05**
 - i) Pharmacodynamic ii) Pharmacogenomics iii) Pharmacokinetics
 - iv) Drug tolerance v) Teratogenicity
- Q.2**
- (a) Discuss absorption process and factors affecting to drug absorption. **06**
 - (b) What is Dale's vasomotor reversal of adrenaline and classify sympathomimetic agents. **05**
 - (c) Explain competitive and non-competitive antagonism with suitable example. **05**
- Q.3**
- (a) Write a short note on: **06**
 - (1) Method prolonging the duration of action of drug
 - (2) Plasma protein binding.
 - (b) Enlist various types of receptor and describe GPCR in detail. **05**
 - (c) Classify cholinergic drugs and write down pharmacological action of acetylcholine. **05**
- Q.4**
- (a) Write a short note on: **06**
 - 1) Structure activity relationship(SAR)
 - 2) First pass metabolism
 - 3) Bioavailability
 - (b) Enlist various types of drug interactions. Write in detail about pharmacokinetic drug interaction. **05**
 - (c) Define autocoids. Write short note on H₁ receptor blocker. **05**
- Q.5**
- (a) Write down pharmacological action of histamine. **06**
 - (b) Write a note on prostaglandins. **05**
 - (c) Write phases of clinical trial. **05**
- Q. 6**
- (a) Explain organophosphorous poisoning and its treatment. **06**
 - (b) Write a note on pentagastrin and angiotensin. **05**
 - (c) Write a note on local anaesthetics. **05**
- Q.7**
- (a) Write a note on drug nomenclature and Define drug and explain different sources **06**
 - (b) Write a note on neuro muscular blocking agents. **05**
 - (c) Define following terms with example **05**
 - i) Potentiation ii) Addition iii) Synergism
 - iv) Agonist v) Partial antagonist