

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV • EXAMINATION – SUMMER • 2014****Subject Code: 143601****Date: 23-06-2014****Subject Name: Medicinal Chemistry and Physiopharmacology****Time: 10:30 am - 01:00 pm****Total Marks: 70****Instructions:**

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

- Q.1 (a)** What is drug metabolism? Discuss Phase-1 transformations. **07**
- (b)** (i) Enumerate the coumarin derived anticoagulants and write the synthesis of one of them. **05**
- (ii) What is Hematinic? Give any two examples. **02**
- Q.2 (a)** (i) Describe in detail about antithrombotic and fibrinolytic agents. **07**
- (ii) Define the term: Allergy
- (b)** Discuss mode of action of antihistamines and SAR of H₁- receptor blockers **07**
- OR**
- (b)** What are Diuretics? Give the classification of it with one example in each class. **04**
- 03**
- Q.3 (a)** (i) How do you classify the oral hypoglycemic agents? Write the structure, names and uses of at least two compounds. **04**
- (ii) Discuss the mode of action of Carbonic Anhydrase Inhibitors as diuretics. **03**
- (b)** Outline the synthesis of the following drugs and mention their uses: (Any two) **07**
- (i) Atenolol (ii) Benzocaine (iii) Aspirin
- OR**
- Q.3 (a)** Discuss the mode of action of sulfonylureas derivatives used as oral hypo glycaemic agents. **07**
- (b)** Define and classify sedatives and hypnotics. Give the synthesis of barbiturate with mode of action. **07**
- Q.4 (a)** Discuss the drugs used as hypertensive and vasolidators. **07**
- (b)** Explain the pharmacology of local anesthetic. **07**
- OR**
- Q.4 (a)** Draw the diagram of respiratory system and label its different parts with function. **07**
- (b)** (i) Discuss the SAR of H₁ Receptor Antagonists. **04**
- (ii) Discuss the role of Insulin. **03**
- Q.5 (a)** Give the classification of antihistamines with one example of each class. **07**
- (b)** (i) Discuss the various routes of drug administration. **04**
- (ii) Define the terms: Anesthetist and Anesthesia **03**
- OR**
- Q.5 (a)** Give classification of General Anesthetics. Write the structure, chemical name, synthesis and uses of two drugs from each class. **07**
- (b)** Outline the synthesis of the following drugs and mention their uses: (Any two) **04**
- (i) TolButamide (ii) Benadryl (iii) Chlorothiazide **03**
