

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV • EXAMINATION – WINTER • 2014****Subject Code: 143601****Date: 31-12-2014****Subject Name: Medicinal Chemistry and Physiopharmacology****Time: 02:30 pm - 05:00 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) Draw the diagram of upper respiratory system and label its different parts with function. **07**
- Q.2** (a) i. Describe in detail about Antithrombolytic and Fibrinolytic agents. **05**
ii. Define the term: Allergy **02**
(b) Discuss mode of action of Sedatives and hypnotics. **07**
- OR**
- (b) What are Diuretics? Give the classification of it with one example in each class. **07**
- Q.3** (a) Give the classification of antihistamines with one example of each class. **07**
- (b) i. Discuss the various routes of drug administration. **07**
ii. Define the terms: Aneasthetist and Aneasthesia
- OR**
- Q.3** (a) Outline the synthesis of the following drugs & mention their uses: (Any two) **07**
i. TolButamide
ii. Benadryl
iii. Chlorothiazide
(b) Give classification of General Aneasthetics. Write the structure, chemical name, synthesis and uses of two drugs from each class. **07**
- Q.4** (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 any one barbiturate derivative. **07**
- OR**
- Q.4** (a) i. How do you classify the oral hypoglycaemic 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 & mention their uses: (Any two) **07**
(i) Chlorpropamide
(ii) Benzocaine
(iii) Aspirin
- Q.5** (a) Discuss pharmacology of local Anesthetics in detail. **07**
(b) i. Give classification of oral hypoglycaemic agents with examples. **05**
ii. What is Hematinics? Give any two examples. **02**
- OR**
- Q.5** (a) Explain mode of action of Barbituarates with examples. **07**
(b) i. Define the term: anticoagulants and write the synthesis of one of them. **04**
ii. Discuss the role of Insulin. **03**
