

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph SEM-IV Examination-Nov/Dec.-2011

Subject code: 240005

Date: 30/11/2011

Subject Name: Pharmacology-I

Time: 02.30 am-05.30 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 merits and demerits of parenteral route. **06**
(b) Define drug and explain different sources of drugs. **05**
(c) Write different phases of clinical trials. **05**
- Q.2** (a) Enumerate factors affecting drug action and explain any two in detail. **06**
(b) Explain drug tolerance and dependence. **05**
(c) Differentiate d-tubocurarine and succinylcholine **05**
- Q.3** (a) Enumerate different types of drug interactions and explain pharmacokinetic types of drug interactions with suitable examples. **06**
(b) Differentiate sympathetic and parasympathetic nervous system. **05**
(c) Classify different types of histamine receptors with examples of agonists and antagonists. Explain triple response. **05**
- Q.4** (a) Write a short note on G- protein coupled receptor. **06**
(b) Differentiate competitive and non-competitive antagonism with suitable examples. **05**
(c) Write a short note on organophosphorous poisoning. **05**
- Q.5** (a) Discuss the role of Cytochrome P450 in drug metabolism. Write a short note on enzyme induction and enzyme inhibition. **06**
(b) Write pharmacology of angiotensin. **05**
(c) Write pharmacology of β – blockers. **05**
- Q. 6** (a) Explain the following terms (any three) **06**
i) Clearance
ii) Plasma Protein Binding
iii) Volume of distribution
iv) Half life ($t_{1/2}$)
(b) Write a short note on acute and sub acute toxicity study. **05**
(c) Classify different types of 5-HT receptors with examples of agonists and antagonists. **05**
- Q.7** (a) Write a short note on sympathetic transmission. **06**
(b) Write a short note on local anaesthetics. **05**
(c) Classify parasympatholytics and write a short note on atropine. **05**
