

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
M. Pharm. – SEMESTER – II • EXAMINATION – WINTER • 2014

Subject Code: 2920103

Date: 24-12-2014

**Subject Name: Pharmacometrics and Methods of
Biological Evaluation of Drugs**

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) Enumerate methods for screening anti-hypertensive activity. Explain any two models for the same. **06**
- (b) Explain OECD guidelines for acute toxicity study of drugs. **05**
- (c) Explain methods to evaluate neuromuscular blocking activity of drugs. **05**
- Q.2** (a) Define inflammatory bowel disease. Explain various screening methods for the drugs used to treat it. **06**
- (b) What is biological standardization? Explain various scopes and limitations of that in brief. **05**
- (c) Explain various techniques used to screen anti-inflammatory agents. **05**
- Q.3** (a) What is the difference between the methods used to evaluate General and Local anesthetics? Explain any one method of each. **06**
- (b) Explain any two models for screening cholinergic drugs. **05**
- (c) What is LD₅₀? Explain methods used to determine it. **05**
- Q.4** (a) What are various methods for evaluation of psychotropic agents? Explain any two methods of the same. **06**
- (b) Enumerate various endocrine disorders. Explain methods for screening oral hypoglycemic agents. **05**
- (c) Explain the methods for biological evaluation of drugs used in atherosclerosis. **05**
- Q.5** (a) What is glaucoma? Explain the methods for screening drugs used to treat glaucoma. **06**
- (b) Explain various official pyrogen tests in detail. **05**
- (c) Explain in vivo methods for evaluation of analgesic drugs. **05**
- Q.6** (a) What is epilepsy? Explain any two models for screening anti-epileptic drugs. **06**
- (b) Explain various models for bioassay of vitamins. **05**
- (c) Explain methods using cysteamine and phenobarbitone in the light of screening of drugs. **05**
- Q.7** (a) What is the principle of evaluation of diuretic agents? Explain the methods used for the same. **06**
- (b) Explain chemical methods for screening of CNS stimulants. **05**
- (c) Explain various models used for evaluation of anti-asthmatic drugs. **05**
