

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.**

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|-------------|-----|--|-----------|
| 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 LD ₅₀ ? 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 |
