

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**

**M.Pharm Semester –II Examination Dec. - 2011**

**Subject code: 920103**

**Date: 08/12/2011**

**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) Define bioassay and Biostandardization. Write down the principle of bioassay. Describe methods of bioassay for Adrenaline. **06**
- (b) Describe different types of toxicity tests with their significance. **05**
- (c) Write about the methods of testing for teratogenicity of drugs. **05**
- Q.2** (a) Define pyrogen toxicity. Write about the sources of such kind of toxicity and official method of evaluation for the same. **06**
- (b) Write about different techniques for microbiological assays of antibiotics. **05**
- (c) Write about OECD guidelines for sub-acute toxicity. **05**
- Q.3** (a) Enlist different in-vivo and in-vitro models for screening of beta blockers and write in detail about any two in-vivo models. **06**
- (b) Describe at least two evaluation technique for parasympatholytic drugs. **05**
- (c) Write any two screening methods for non-depolarizing skeletal muscle relaxants. **05**
- Q.4** (a) Enumerate different models for screening of anti-inflammatory drugs and write in detail about any two acute models for it. **06**
- (b) Describe any two models for evaluation of anti-psychotic drugs. **05**
- (c) Write about the evaluation techniques for nootropic drugs. **05**
- Q.5** (a) Enlist different evaluation techniques for cardiogenic drugs. Write about any two techniques for the same. **06**
- (b) Write in brief about different methods for screening of antihypertensive incorporating use of genetically modified animals. **05**
- (c) Write down any two screening methods for anti-anginal drugs. **05**
- Q. 6** (a) Enumerate different models for screening of anti-ulcer agents. Write about the pylorus ligation model in detail. **06**
- (b) Describe in details about any one model for evaluation of drug which is useful in case of type II diabetes mellitus. **05**
- (c) Write about any one anti-ovulatory model for screening of anti-fertility agents useful in women. **05**
- Q.7** (a) Enlist different models for evaluation of anti-glaucoma agents. Write any two in-vivo models for glaucoma in detail. **06**
- (b) Write about any one models for screening of drugs useful for IBD. **05**
- (c) Describe any two evaluation models for centrally acting analgesic drugs. **05**

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