

GUJARAT TECHNOLOGICAL UNIVERSITY
M. Pharm. – SEMESTER – II • EXAMINATION – WINTER • 2015

Subject Code: 2920103**Date: 07-12-2015****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) Explain the scope and limitation of bioassay. Describe briefly about bioassay of Digitalis. **06**
- (b) Describe acute toxicity testing as per OECD guideline **05**
- (c) Explain tests for teratogenicity as per FDA guideline. **05**
- Q.2** (a) Describe official pyrogen test in detail. **06**
- (b) Write a note on different techniques for microbiological assays of antibiotics. **05**
- (c) How safety assessment of plastic containers for ophthalmic preparation is carried out. **05**
- Q.3** (a) Enumerates various methods for screening of local anaesthetics agents and explain any one in detail. **06**
- (b) Describe any two evaluation technique for parasympathomimetics drugs. **05**
- (c) Explain any one *in vivo* and *in vitro* method for evaluation of antiepileptic agents. **05**
- Q.4** (a) Enlist various *in vivo* methods for screening of anti-inflammatory agents. Explain any two in brief. **06**
- (b) Describe HAFFNER's tail clip method and hot plate method for evaluation of analgesic activity. **05**
- (c) Explain any two methods for evaluation of CNS stimulants. **05**
- Q.5** (a) Enlist various methods for induction of arrhythmias in animals. Describe any one model in brief. **06**
- (b) Write a note on Lagendorff Technique. **05**
- (c) Write a note on Goldblatt hypertension model. **05**
- Q.6** (a) Enumerate different animal model for evaluation of anti-ulcer agents. Explain pylorus-ligation method in brief. **06**
- (b) Write a note on LIPSCHITZ test. **05**
- (c) Describe different animal models for evaluation of estrogen activity. **05**
- Q.7** (a) Explain any two models for assessment of diabetes mellitus in rats. **06**
- (b) Explain α -chymotrypsin induced glaucoma in rats **05**
- (c) Describe methods to differentiate ganglion blockers and adrenergic neuron blockers. **05**
