Seat No.:	Enrolment No.
Seat No	Elifoliticiti No.

GUJARAT TECHNOLOGICAL UNIVERSITY

M. Pharm. – SEMESTER – II • EXAMINATION – SUMMER • 2014

Subject Code: 2920103 Date: 29-05-2014

Subject Name: Pharmacometrics and Methods of Biological Evaluation of Drugs Time: 02:30 pm - 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) Define Bioassay.Briefly describe the following methods of bioassay- (i) RIA of Insulin (ii) Pigeon method for Digitalis	06
(iii) Rabbit method for D-tubocurarine.(b) Explain various models used for evaluation of Local Anaesthetic activity(c) Write a short note on preclinical toxicity tests required to be conducted for new drug.	
Q.2 (a) Describe any three methods for evaluation of activity of coronary vasodila drugs.	ator 06
(b) Discuss various animal models for screening of anxiolytic agents that have effect on behaviour of animals	re 05
(c) Write a short note on- Microbiological Assay of Antibiotics.	05
Q.3 (a) Describe any two methods for inducing hypertension in rats and explain Indirect method of recording BP in rats.	06
 (b) Explain the following methods for screening sympatholytic activity of dru (i) Prolapse of Nictitating Membrane (ii) Splenic strip of cat 	igs 05
(c) Write a short note on –Experimental models of Cataract.	05
Q.4 (a) Describe the methods used for inducing Diabetes in experimental animals (b) Discuss the principle of evaluation of anti-inflammatory agents by (i) Freund's Adjuvant Arthritis Model (ii) Granuloma Pouch Method	. 06 05
(c) Write a short note on –Pyrogen Test	05
Q.5 (a) Explain the following animal models for evaluation of Thyroxine Analogo (i) Suppression of Iodine Uptake (ii) Oxygen Consumption Rate	ues- 06
(b) Discuss the following methods for evaluation of Testicular hormones -(i) Castration of male rats	05
(ii) Caponization of Cockrels (c) Write a short note on - Screening of Diuretics	05

Q.6 (a) Explain in brief various animal models for Inflammatory Bowel Disease (IBD)	
(b) Describe Thymus and Adrenal Involution models for evaluation of	
Glucocorticoid activity	
(c) Discuss the principle and use of following equipments in evaluating activity	
of drugs and name the category of drug for which it is useds	
(i) Electroconvulsiometer	
(ii) Cook's Pole Climbing Apparatus	
Q.7 (a) Explain how cytoprotective activity of drugs used in Peptic Ulcer can be evaluated.	06
(b) Discuss Chemical and Thermal methods for screening of analgesic drugs.(c) Write a short note on – Models for Hyperlipidaemia	05 05
