Seat I	No.:	Enrolment No	
		GUJARAT TECHNOLOGICAL UNIVERSITY	
a 1 9		M. Pharm. – SEMESTER – II • EXAMINATION – WINTER 2013	
•		Code: 2920103 Date: 28-11-2013	
		Name: Pharmacometrics and Methods of Biological Evaluation of Drugs	
Tim Instru		0.30 am - 01.30 pm Total Marks: 80	
Instru		Attempt any five questions.	
		Make suitable assumptions wherever necessary.	
	3.	Figures to the right indicate full marks.	
Q.1	(a)	Describe a qualitative test for evaluation of mydriatic activity giving special	06
	1.\	emphasis on principles, procedure and evaluation.	05
	b)	Enlist <i>in-vitro</i> methods of detection of diuretic activity and explain any two of them in detail.	05
	(c)	Explain briefly following terms:	05
		a) Teratogenicity b) Mutagenicity	
		c) LD 50 d) ED 50 e) Sub-Acute toxicity study	
Q.2	(a)	Discuss the principle involved in evaluation of anti asthmatic agents using different models.	06
	(b)	Enlist various pyrogen tests and describe official pyrogen test in detail.	05
	(c)	Write a note on Alpha-chymotrypsin induced glaucoma model	05
Q.3	(a)	Discuss the principle and use of the following: i) Plus maze apparatus ii) Analgesiometer	06
	(b)	Give various models for screening of agents as anti-Parkinson's Disease. Explain the highly acceptable model.	05
	(c)	Describe the method of evaluation of local anaesthetics through surface aesthesia.	05
Q.4	(a)	Describe various methods for induction of dyslipidemia	06
	(b)	Write about any one model for screening of drugs useful for IBD.	05
	(c)	Write about the evaluation techniques for nootropic drugs	05
Q.5	(a)	Enumerate different models for screening of anti-ulcer agents. Write about the pylorus ligation model in detail.	06
	(b)	Compare and contrast the maximal electro shock (MES) and chemically induced convulsion models for antiepileptic activity.	05
	(c)	Discuss chemical and electrical methods of inducing arrhythmias	05
Q. 6	(a)	Write a short note on diabetic animal models.	06
	(b)	Write about different techniques for microbiological assays of antibiotics.	05
	(c)	Discuss application of potentiation of hexobarbital sleeping time.	05
Q.7	(a)	How will you find out possible mechanisms of action of a drug that is antihypertensive?	06
	(b)	Describe methods to differentiate ganglion blocker and adrenergic neuron	05

05

Define Bioassay and give its merits and demerits. Write briefly about

blockers

bioassay of Digitalis.