Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY M. PHARM. - SEMESTER - II • EXAMINATION - WINTER 2012

Subject code: 2920103 Date: 10-01-2013
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 limitations of bioassay. Describe the different methods	06
	<i>a</i> \	for the bioassay of insulin	0.=
	(b)	Describe the different animal models for the evaluation of anti-diabetic agents.	05
	(c)	Answer the Following: 1. LAL test 2. Rabbit's head drop method	05
,	(a)	Enumerate the different methods for the evaluation of analgesics. Discuss any two methods of them in detail.	06
	(b)	Explain the LIPSCHITZ Test for the evaluation of diuretics.	05
	(c)	Write note on experimental models for the evaluation of bronchodilators.	05
Q.3	(a)	Discuss the different in-vivo and in-vitro models for the evaluation of parasympathomimetics.	06
	(b)	Discuss OECD guidelines for the chronic toxicity study.	05
	(c)	Enumerate the different animal models for the evaluation of anti-hypertensive	05
	(•)	agents and explain DOCA salt induced hypertension in rats.	••
Q.4	(a)	Describe the following agents in light of screening:	06
C -	(/	1. Strophanthin 3. Triton	
		2. Cysteamine	
	(b)	Enlist the different methods for the assessment of glucocorticoid activity and	05
	` '	describe any two of them in brief.	
	(c)	Describe the different In-vitro methods of testing for the genotoxicity of	05
		drugs.	
Q.5	(a)	Discuss the animal models for the chemical induced convulsion.	06
	(b)	Enumerate the different animal models for the evaluation of anti-ulcer agents and discuss pylorus-ligation method in detail.	05
	(c)	Describe working and application of rota rod's apparatus.	05
Q. 6	(a)	Explain any two models for the evaluation of anti-parkinsonian drugs.	06
	(b)	Write a note on naphthalene induced cataract in rats.	05
	(c)	Describe agar plate method for the microbiological assay of anti-biotics.	05
Q.7			06
	(a)	Describe the different animal models for the evaluation of anxiolytic activity.	
	(b)	Discuss the various methods for the assessment of estrogen activity.	05
	(c)	Discuss the different animal models for the evaluation of anti-depressant drugs	05