Seat No.: _____ *Enrolment No._____*

GUJARAT TECHNOLOGICAL UNIVERSITY

M. Pharm. Semester – IIND Examination –June/July- 2011

Subject code: 920103

Subject Name: Pharmacometrics and Methods of Biological Evaluation of drugs

Date:01/07/2011 **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)**	Describe various models for cataract	**06**
	(b)	Give Principles of Bioassy	**05**
	(c)	How will you select models for screening centrally acting analgesic agents?	**05**
Q.2	**(a)**	Describe *in vivo* studies for drugs acting on β adrenergic receptor	**06**
	(b)	Differentiate between stress induced, chemical induced and surgical models for Ulcer in rodents.	**05**
	(c)	Explain the aortic band model for CCF and the parameters to be measured.	**05**
Q.3	**(a)**	What are models for chemically induced epilepsy in rodents? Describe any one of them.	**06**
	(b)	Write a note on Antibiotic Bioassay	**05**
	(c)	Enlist various *in-vitro* methods for screening of anti-inflammatory agents with brief information of any two.	**05**
Q.4	**(a)**	Write note on special toxicity tests- back ground, tests and brief procedure.	**06**
	(b)	Enlist the various in-vitro models for screening of neuro-muscular blockade.	**05**
	(c)	Describe current OECD guidelines for acute toxicity tests	**05**
Q.5	**(a)**	Write a note on diet induced hyperlipidemia in rodents.	**06**
	(b)	Give various parameters for screening of sedative agents.	**05**
	(c)	How safety features of packaging materials can be tested using animals?	**05**
Q. 6	**(a)**	Give various models for screening of agents as anti-Parkinson's Disease. Explain the highly acceptable model.	**06**
	(b)	Enlist various models of arrhythmia. Describe any one briefly.	**05**
	(c)	Write a note on- *in vitro* models for study of anti- asthmatic agents.	**05**
Q.7	**(a)**	Differentiate between models for Type-I and Type-II diabetes mellitus.	**06**
	(b)	Write a note on- bioassay of Insulin	**05**
	(c)	Give various methods for screening of local anesthetic agents.	**05**

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