Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY M.PHARM - SEMESTER-1 EXAMINATION - SUMMER-2019

Subject Code: MPL103T Date: 01/06/2019

Subject Name: Pharmacological and Toxicological Screening Methods-I

Time: 02:30 PM TO 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)	Explain the importance of transgenic animals in pharmacological screening with suitable example.	06
	(b) (c)	Write a note on euthanasia.  Explain the importance of bioassay.	05 05
Q.2	(a) (b) (c)	Write in detail note on Good Laboratory Practice. Explain in brief behavioral study in preclinical screening. Enlist screening model for antiepileptic activity. Explain MES-induced convulsion in detail.	06 05 05
Q.3	<ul><li>(a)</li><li>(b)</li><li>(c)</li></ul>	Enlist models for screening of muscle coordination activity. Explain in detail about Rota rod apparatus.  Enlist the models for screening of CNS stimulant activity. Write a note on photoactometer.  Enlists and describe various screening techniques used for evaluation of Anti-Parkinson's drugs.	06 05 05
Q.4	(a) (b) (c)	Enlist the various invivo and invitro antiasthmatic screening methods. Explain an acute model of asthma in detail.  Write a note on orientation behavior in screening of aphrodisiac activity.  Enlist various methods for induction of ulcer in animals. Explain any one in detail.	06 05 05
Q.5	(a) (b) (c)	Discuss in-vivo methods for evaluation of analgesic activity.  Enlist different methods for screening of diuretic activity. Write a note on metabolic cages.  Write a note on methods used for evaluation of anti-inflammatory activity.	06 05 05
Q. 6	(a) (b) (c)	Enlist various methods to induce hyperlipidemia. Explain the importance of High fat diet in pharmacological screening process.  Explain different vitro models for screening of anticancer activity.  Explain any one screening models for immunopharmacological activity.	06 05 05
Q.7	(a) (b) (c)	Enlist different models for induction of type 2 diabetes mellitus. Explain in vivo methods in detail.  Write a note on Lagendorff heart preparation.  Explain in brief alternative animal experimentation techniques.	06 05 05

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