

KRISHNA UNIVERSITY, Machilipatnam

<Notification Details>

Pharmacological and Toxicological Screening Methods (17S01103)

M.Pharmacy - (Pharmacology)

Time: 3 hrs.

Max Marks: 70

Note: 1. Answer ALL the questions.**2. Each question carries 14 Marks**

<u>UNIT-I</u>		
1.	a)	Define rodents. Explain the general characteristics and applications of different laboratory animals.
	b)	Discuss various techniques of handling of laboratory animals and sex determination.
OR		
2.	a)	What do you mean by transgenic animals? Explain the production, maintenance and applications of transgenic animals.
	b)	What is euthanasia? Discuss about anaesthesia and euthanasia used in experimental animals.
<u>UNIT-II</u>		
3.	a)	Explain about animal alternatives models for preclinical screening of new substances for their pharmacological and toxicological studies.
	b)	Explain various preclinical screening models to study antidepressant activity of a new compound.
OR		
4.	a)	Explain the principle and procedure to study the muscle co-ordination activity using rotarod apparatus.
	b)	Discuss the various preclinical models used to study antiepileptics.
<u>UNIT-III</u>		
5.	a)	How will you screen new substance for their anti-asthmatic activity using in vitro and in vivo models?
	b)	Explain preclinical screening models for studying anti-allergic drugs.

MODEL QUESTION PAPER

OR			
6.	a)	Discuss about various in vitro screening models for anti-infertility agents.	
	b)	Discuss about various in vivo screening models for aphrodisaics.	
<u>UNIT-IV</u>			
7.	a)	Explain various methods to induce hypertension in animals.	
	b)	What are the various preclinical models to study diuretic effect of any agent? Discuss them.	
OR			
8.	a)	Describe in vitro screening models for compounds useful in the treatment of breast cancer.	
	b)	Explain about chemical-induced colon carcinogenesis models to screen anticancer drugs for colon cancer.	
<u>UNIT-V</u>			
9.	a)	Explain the immunoassay of insulin	
	b)	Explain the general principle and protocol of an immunoassay.	
OR			
10.	a)	Explain the limitations of animal experimentation and alternate animal experiments.	
	b)	Write short note on radioimmunoassay (RIA) in detail.	
