

**As Per PCI Regulations
Second Year B. Pharm. • Semester-IV**

EXPERIMENTAL PHARMACOLOGY-I

(Bridges The Gap Between Animal Models And Computer Simulation Models)

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**NIRALI
PRAKASHAN**
ADVANCEMENT OF KNOWLEDGE

About The Authors



GHANSHYAM PANIGRAHI is working as Associate Professor and Head, Department of Pharmacology, Royal College of Pharmacy and Health Sciences, Berhampur, Odisha. He has deep insight into experimental pharmacology and preclinical testing of drugs. He has experience of 12 years in teaching experimental pharmacology to undergraduate and postgraduate students. His fields of research interest are screening of natural products for diabetes mellitus and associated disorders. His research work has been published in more than 30 research articles. He has guided numbers of M. Pharm. and Ph.D. scholars to carry out their research work. Dr. Panigrahi is a life member of Indian Pharmacological Society (IPS) and The Association of Pharmaceutical Teachers of India (APTI).



ARJUN PATRA obtained postgraduate and doctorate degree from Birla Institute of Technology, Mesra, Ranchi. Recently he has completed Postdoctoral Research in USA under Raman Fellowship funded by University Grants Commission. He has around 15 years of teaching experience in various pharmacy colleges at Berhampur, Moradabad and Jaipur, and currently working as Assistant Professor at Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur, Chhattisgarh. Dr. Patra has supervised M. Pharm. and Ph.D. students and published and presented research papers in national/international journals/conferences. Dr. Patra specializes in Pharmacognosy and has studied a wide range of plants for their phytochemical and pharmacological potential. Dr. Patra's major fields of research interest are natural product exploration, nano-delivery of natural products for treatment of cancers and screening of medicinal plants for different pharmacological activities.



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Contents

Experiment No.	Title	Page No.
1.	Introduction to experimental pharmacology	G.1 - G.2
2.	Commonly used instruments in experimental pharmacology	1.1 - 1.10
3.	Study of common laboratory animals	1.3
4.	Maintenance of laboratory animals as per CPCSEA guidelines	2.1 - 2.8
5.	Common laboratory techniques: Blood withdrawal, serum and plasma separation, anaesthetics and euthanasia used for animal studies	3.1 - 3.6
6.	Study of different routes of drugs administration in mice	4.1 - 4.6
7.	Effect of drugs on ciliary motility of frog oesophagus	4.7
8.	Effect of drugs on rabbit eye	4.8
9.	Effect of drugs on locomotor activity using photoactometer apparatus in mice	4.9
10.	Effects of skeletal muscle relaxants using rota-rod apparatus in mice	4.10
11.	Effect of drugs on locomotor activity using photoactometer apparatus in mice	4.11
12.	Anticonvulsant effect of drugs by MES and PTZ method in rats	4.12

6. Study of different routes of drugs administration in mice
Objective 1: To study different routes of administration in the mice/rats.
Objective 2: To study the effect of pentobarbital sodium mice after administrated through different routes.

7. Study of effect of hepatic microsomal enzyme inducer the pentobarbital induced sleeping time in mice
Objective: To study the effect of hepatic microsomal enzyme induction on the pentobarbital induced sleeping time in mice.
Effect of drugs on ciliary motility of frog oesophagus
Objective: To find out the effects of cholinergic anticholinergic drugs on ciliary motility of frog oesophagus
Effect of drugs on rabbit eye
Objective: To find out the effects of pilocarpine on rabbit eye.
Effects of skeletal muscle relaxants using rota-rod apparatus
Objective: To find out the skeletal muscle relaxant effect of diazepam in mice using rota-rod apparatus.
Effect of drugs on locomotor activity using photoactometer apparatus in mice
Objective: To study the effects of diazepam on locomotor activity in mice using photoactometer apparatus.
Anticonvulsant effect of drugs by MES and PTZ method in rats
Objective 1: To study the anticonvulsant activity of phenytoin by using maximal electro shock induced convulsion in rats.
Objective 2: To study the anticonvulsant effect of diazepam by using Pentylenetetrazole (Metrazol) induced convulsions in mice.