

# 18BP048 PHARMACOLOGY-I LABORATORY

## LABORATORY EXPERIMENTS

1. Introduction to experimental pharmacology.
2. Commonly used instruments in experimental pharmacology.
3. Study of common laboratory animals.
4. Maintenance of laboratory animals as per CPCSEA guidelines.
5. Common laboratory techniques. Blood withdrawal, serum and plasma separation, anesthetics and euthanasia used for animal studies.
6. Study of different routes of drugs administration in mice/rats.
7. Study of effect of hepatic microtonal enzyme inducers on the Phenobarbitone sleeping time in mice.
8. Effect of drugs on culinary motility of frog esophagus
9. Effect of drugs on rabbit eye.
10. Effects of skeletal muscle relaxants using rota-rod apparatus.
11. Effect of drugs on locomotors activity using act photometer.
12. Anticonvulsant effect of drugs by MES and PTZ method.
13. Study of stereotype and anti-catatonic activity of drugs on rats/mice.
14. Study of anxiolytic activity of drugs using rats/mice.
15. Study of local anesthetics by different methods

**Note:** All laboratory techniques and animal experiments are demonstrated by simulated experiments by soft wares and videos

## RECOMMENDED BOOKS (LATEST EDITIONS)

- a. Rang H. P., Dale M. M., Ritter J. M., Flower R. J., Rang and Dale's Pharmacology,.Churchil Living stone Elsevier
- b. Katzung B. G., Masters S. B., Trevor A. J., Basic and clinical pharmacology, TataMc Grew-Hill
2. Goodman and Gilman's, The Pharmacological Basis of Therapeutics
- a. Marry Anne K. K., Lloyd Yee Y., Brian K. A., Robin L.C., Joseph G. B., Wayne A. K., Bradley R.W., Applied Therapeutics, The Clinical use of Drugs, The Point Lippincott Williams &Wilkins
- b. Mice M.J, Genet S.B and Per M.M. Lippincott's Illustrated Reviews- Pharmacology
- c. K.D.Tripathi. Essentials of Medical Pharmacology, JAYPEE Brothers Medical Publishers (P) Ltd, New Delhi.
- d. Sharma H. L., Sharma K. K., Principles of Pharmacology, Pares medical publisher
- e. Modern Pharmacology with clinical Applications, by Charles R.Craig & Robert,
- f. Ghost MN. Fundamentals of Experimental Pharmacology. Hilton & Company, Kolkata.
- g. Kulkarni SK. Handbook of experimental pharmacology.Vallabh Prakashan,

