

PHARMACOLOGY

Practicals Syllabus:

Introduction to the following topics pertaining to the experimental pharmacology have to be discussed and documented in the practical manuals.

1. Introduction to experimental pharmacology.
2. Study of laboratory animals.
(a) Mice; (b) Rats; (c) Guinea pigs; (d) Rabbits
3. Commonly used instruments in experimental pharmacology.
4. Different routes of administration of drugs in animals.
5. Types of pre-clinical experiments: In-Vivo, In-Vitro, Ex-Vivo, etc.
6. Techniques of blood collection from animals.

Experiments:

Note: Animals shall not be used for doing / demonstrating any of the experiments given. The given experiments shall be carried- out / demonstrated as the case may be, ONLY with the use of software program(s) such as 'Ex Pharm' or any other suitable software

1. Study of local anaesthetics on rabbit eye.
2. Study of Mydriatic effect on rabbit eye.
3. Study of Miotic effect on rabbit eye.
4. Effect of analgesics using Analgesiometer.
5. Study of analgesic activity by writhing test.
6. Screening of anti-convulsant using Electro Convulsiometer.
7. Screening of Muscle relaxants using Rota-Rod apparatus.
8. Screening of CNS stimulants and depressants using Actophotometer.
9. Study of anxiolytic activity using elevated plus maze method.
10. Study of effect of drugs (any 2) on isolated heart
11. Effect of drugs on ciliary motility on frog's buccal cavity.
12. Pyrogen testing by rabbit method.

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