

**ANSWER THE FOLLOWING QUESTIONS**  
**SUBJECT: PHARMACOLOGY**

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1. Define the following terms:

- A. Pharmacology    B. Bioavailability    C. Toxic effects    D. Side effects  
E. Pharmacokinetic    F. Pharmacodynamics    G. Posology    H. Metabolism

2. Explain the objectives of experimental pharmacology.

3. Write the biological name of following animals.

A. Frog:	D. Guinea Pig:
B. Mice:	E. Hamster:
C. Rat:	F. Rabbit:
4. Explain the experimental uses of rat and rabbit in experimental pharmacology.

5. Enlist the types of lever uses in isolated tissue experiments.

6. Differentiate between isotonic, isometric and auxotonic contraction.

7. Enlist the ingredients of tyrode solution with their purpose.

8. Write injection sites for various experimental animals.

9. Define IN-VIVO, IN-VITRO, EX-VIVO preclinical experiment with suitable example.

10. Write difference between In vivo, In vitro and Ex vivo model of preclinical study.

11. Enlist the blood collection techniques from experimental animals.

12. Write the effects of atropine and lignocaine on rabbit eye regarding pupil size, light reflex and touch reflex.

13. Define meiosis and mydriasis.

14. Write down principle of evaluation of analgesic effect in rat or mice.

15. Write procedure for Hot plate analgesiometer for analgesic activity in rat/mice.

16. What is the meaning of Writhing?

17. Write the symptoms of writhing in mice induced by chemical methods.

18. Write procedure for Maximum Electro convulsive seizure in rat/mice.



19. Write principle and procedure for the Screening of Muscle relaxants using Rota-Rod apparatus.

20. Write principle and procedure for the Screening of CNS stimulants and depressants using Actophotometer

21. Write purpose, rationality and procedure for Study of anxiolytic activity using elevated plus maze method.

22. Write observation table for Study of various drug effects on isolated frog heart.

23. Write principle for the effect of drugs on the ciliary motility of frog buccal cavity.

24. Explain the sham test and main test of rabbit pyrogen experiments.

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