

QP Code: 830006

Reg. No.....

**Eighth Semester B. Pharm Degree Regular/Supplementary  
Examinations July 2023  
Experimental Pharmacology  
(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw diagrams wherever necessary

**Essays**

**(2x10=20)**

1. What are the objectives of research methodology. Write the steps involved in the process of a systematic literature review.
2. Briefly explain:
  - PTZ – induced convulsions model in mice.
  - Techniques of euthanasia in common laboratory animals.

**Short Notes**

**(7x5=35)**

3. Classify common laboratory animals. Mention the applications of *danio rorio* in biomedical research.
4. Explain MTT assay.
5. *Mus musculus* as a common laboratory animal. Mention the bleeding and anesthesia techniques in *Rattus norvegicus*.
6. Describe the breeding methods in rodents.
7. Principle and procedure for Tail suspension test for antidepressant activity.
8. Explain the *in-vivo* method of sodium nitrite-induced amnesia test.
9. Explain the CPCSEA guidelines on maintenance of laboratory animals.

**Answer Briefly**

**(10x2=20)**

10. Differentiate rodents and non-rodents.
11. Compare Wistar rats and Sprague-Dawley rats.
12. Enlist four screening methods for CNS stimulants.
13. Choice of rabbit in toxicological research.
14. Uses and types of student's t-test.
15. Procedure for collection of blood from cardiac puncture in rat.
16. Procedure for inhibition of apomorphine climbing in mice model.
17. Write the difference between *in-vitro* and *in-vivo* preclinical studies.
18. Concepts of '3Rs' in preclinical studies.
19. Differentiate in-bred and outbred-strains.

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