## Eighth Semester B. Pharm Degree Regular/Supplementary **Examinations July 2023 Experimental Pharmacology**

# (2017 Scheme)

#### Time: 3 Hours

- 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

- 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

- 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**

- 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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#### Max. Marks: 75

#### (7x5=35)

### (10x2=20)

(2x10=20)