(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. Explain two models to screen anti-cancer activity of test compounds.
- 2. Explain animal models of acute and chronic inflammation to test the antiinflammatory activity of compounds.

Short Notes

- 3. Write the principle of an electrically induced seizure model to test anti-convulsant activity.
- 4. Write a note on the maintenance of animals as per CPCSEA.
- 5. Explain a chemically-induced model of diabetes in rats.
- 6. Write about any two stress-induced ulcer models in rats.
- 7. Write the uses of rota-rod test in experimental pharmacology.
- 8. One animal model to test the activity of atropine-like drugs.
- 9. Differentiate transgenic and mutant animals.

Answer Briefly

- 10. Write the importance of positive control.
- 11.List two applications each, for hamsters and monkeys in experimental pharmacology.
- 12.List two methods of euthanasia followed earlier, which are now considered unethical as per CPCSEA standards.
- 13. What are the characteristic feature and application of db/db mice.
- 14. Explain the method that allows collection of large volume (> 5 ml) of blood from rats.
- 15. Interpret the absence of corneal reflex after instilling a test drug in the eye.
- 16. Name two classes of compounds that can contract rat fundus muscles.
- 17.List two animal models/tissues and their corresponding responses to evaluate sympathetic activity.
- 18. When do you use unpaired 't' test to analyze data.
- 19. What are *ex-vivo* studies.

Reg. No.....

(2x10=20)

Max. Marks: 75

(7x5=35)

(10x2=20)

(22,10-20)