Rajiv Gandhi University of Health Sciences

First Semester M. Pharm Degree Examination - MAY-2018

[Time: 3 Hours]

[Max. Marks: 75] Pharmacological and Toxicological Screening Methods-I Q.P. CODE: 5135

Your answers should be specific to the questions asked. Draw neat, labeled diagrams wherever necessary.

LONG ESSAY (Answer any Three)

- 1. Name the various methods to screen a compound for antiparkinsonism activity and explain any two methods in detail.
- 2. Name the methods to screen an agent for antiepileptic activity. Explain any two models.
- 3. Discuss one *in vivo* and one *in vitro* method each for evaluating a drug for central and peripheral analgesic activity.
- 4. What are the screening methods for antiarrythmic activity of a drug and discuss any one invitro and one invivo method.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

- 5. Discuss various methods to produce transgenic animals.
- 6. Discuss two *in vivo* methods to screen an agent for treatment of epilepsy.
- 7. Enumerate the any two *in vivo* screening methods for evaluation of anti-inflammatory activity of a drug.
- 8. Discuss the any two methods to evaluate antiemetic agents.
- 9. List out the various screening methods for antiulcer activity. Explain any one method.
- 10. Explain the isoprenaline induced myocardial necrosis model for screening of drugs in the treatment of myocardial infarction.
- 11. Write a note on MTT assay and tumor xenograft model for screening anticancer activity.
- 12. List the methods to screen antidiabetic agents. Discuss the method to evaluate alpha glucosidase inhibitory activity.
- 13. Explain two methods to evaluate an agent for immunosuppressant activity.
- 14. Explain the limitations of animal experiments in drug discovery.

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3 X 10 = 30 Marks