

[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)**

**3 X 10 = 30 Marks**

1. Enumerate methods to evaluate antidepressant activity of an agent. Discuss one *in-vitro* and one *in-vivo* method.
2. What are the mechanisms by which anti-anxiety agents act? List the screening methods and discuss any two methods.
3. List out the various screening methods for anti-ulcer activity. Discuss one stress induced and one chemically induced ulcer model.
4. List the commonly used methods to screen an agent for anti-hypertensive agents. Discuss one *in-vitro* and one *in-vivo* method.

**SHORT ESSAY (Answer any Nine)**

**9 X 5 = 45 Marks**

5. Write a note on the pharmacological uses of rat as laboratory animal.
6. Write a brief note on maintenance of laboratory animals.
7. Explain two models for screening an agent for anti-parkinsonian activity.
8. Explain a model to evaluate central analgesic activity of an agent.
9. Write a note on preclinical screening methods of anti-emetic agents.
10. Explain two preclinical models to evaluate anti-pyretic activity of an agent.
11. Enumerate the models for screening of anti-anginal activity and explain the Langendorff technique.
12. List the methods to screen anti-diabetic agents, explain any one model.
13. Write a note on limitations of animal experimentation.
14. Write a note on immunoassays.

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