

**Ph.D. Course work examination, July-2023**  
**ZOOLOGY**  
**Course-IV: 1. Reproductive Biology and Toxicology**

**Time: 3 Hours**

**Maximum Marks: 70**

**Instructions to candidates:**

- 1. Answer all questions*
- 2. Draw diagram wherever necessary*

1. Explain in detail the structure of mammalian sperm and discuss the capacitation of spermatozoa with a neat labelled diagram. (14)

OR

What is folliculogenesis? Explain in detail the process of ovulation with a neat labeled diagram adding a note on its functions.

2. Briefly explain Principles and techniques of fertility regulation in males with a neat labelled diagram. (14)

OR

What are gonads? Discuss the biological action of gonadotropins on gonads.

3. Explain the different methodologies used in toxicity testing. (14)

OR

Define toxicity and briefly describe the principles of toxicology

4. Discuss about the different factors that influence the studies related to toxicity. (14)

OR

Write a note on Reproductive toxicity.

5. Discuss the evaluation of herbal drugs and formulations by biological methods. (14)

OR

Discuss the methods practiced for the preparation of drug solutions.

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