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**NA—77—2023**

**FACULTY OF SCIENCE AND TECHNOLOGY**

**B.Sc. (First Year) (Second Semester) EXAMINATION**

**NOVEMBER/DECEMBER, 2023**

**(New Pattern)**

**ZOOLOGY**

**Paper–IV**

**(Developmental Biology of Vertebrates)**

**(Saturday, 16-12-2023)**

**Time : 10.00 a.m. to 12.00 noon**

*Time—2 Hours*

*Maximum Marks—40*

*N.B. :—* (i) Attempt *all* questions.

(ii) Illustrate your answers with suitable and labelled diagrams wherever necessary.

1. What is spermatogenesis ? Describe in detail the process of spermatogenesis in mammals. 15

*Or*

(a) What is fertilization ? Explain the event occurs in fertilization of frog. 8

(b) Describe the structure of ovum of frog. 7

2. What is foetal membrane ? Explain the structure and functions of yolk sac and Allantois. 15

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Or

- (a) Explain the causes, diagnosis and treatment of infertility in female. 8
- (b) Explain incomplete parthenogenesis. 7
3. Write short notes on any *two* of the following : 10
- (a) Regeneration in chordates
- (b) Megalecithal egg
- (c) Functions of placenta
- (d) Gamete Intra Fallopian Transfer (GIFT).

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