

**NTK/KW/15/5831**

**Bachelor of Science (B.Sc.) Semester—III Examination**  
**ZOOLOGY**  
**(Life & Diversity of Animals—Chordates)**  
**Paper—I**

Time—Three Hours]

[Maximum Marks—50

- N.B. :—** (1) All questions are compulsory  
(2) All questions carry equal marks.  
(3) Draw well labelled diagrams wherever necessary.

1. Write in brief structure of ascidian tadpole larva and add a note on retrogressive metamorphosis. 10

**OR**

Write notes on :

- (A) Give an account of excretory system of *Amphioxus*. 5

- (B) Structure of pharynx of *Amphioxus*. 5

2. Give an account on migration in fishes and add a note on its causes. 10

**OR**

Write notes on :

- |   |    |
|---|----|
| (A) Parental Care in Anura                          | 5  |
| (B) Neotony in Amphibia.                            | 5  |
| 3. Describe in detail the process of Fertilization. | 10 |

**OR**

Write notes on :

- |  |    |
|--|----|
| (A) Development of Placoid scales                                | 5  |
| (B) Larval stages of Fish.                                       | 5  |
| 4. Write in brief the development of respiratory organs in Frog. | 10 |

**OR**

Write notes on :

- |  |   |
|--|---|
| (A) Cleavage and Blastulation  | 5 |
| (B) Draw a well labelled diagram of external gill stage of Frog.               | 5 |
| 5. Write <b>Four</b> on <b>Five</b> lines on the following (Any <b>Ten</b> ) : |   |
| (i) Sensory Vesicle  |   |
| (ii) Wheel Organ   |   |
| (iii) Atrium   |   |

- |                       |         |
|-----------------------|---------|
| (iv) Air bladder      |         |
| (v) Chondrichthyes    |         |
| (vi) Apoda            |         |
| (vii) Spermiogenesis  |         |
| (viii) Antifertilizin |         |
| (ix) Cycloid Scale    |         |
| (x) Micromeres        |         |
| (xi) Epiboly          |         |
| (xii) Systemic Arch.  | 1×10=10 |

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**Note :-** MSS says "Protochordata to Amphibia". Press has followed Heading Envelope.

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