

### Mode of Examination: Open Book Examination

Unique Paper Code : 42231202\_OC  
Name of the Paper : Comparative Anatomy and Developmental Biology of Vertebrates  
Name of the Course: B.Sc. (P) Life Sciences  
Semester : II, CBCS  
Duration : 3 hours  
Maximum Marks : 75

#### Instruction for Students

Write your Roll No., Name of the paper, Course, Semester, and Date of examination on the first page of answer sheet.

Attempt ANY FOUR questions. All questions carry equal marks.

Q1 Explain the succession of kidney in vertebrates. (18.75)

Q2 Describe the structure of alimentary canal in fishes. (18.75)

Q3 Give a comparative description of reptilian and avian brain with help of diagrams. (18.75)

Q4. Explain the process of female gamete formation in animals. What are different basis to classify of female gametes. (18.75)

Q5 Discuss the blocking mechanism to polyspermy in animals. Define stem cells. Explain types of stem cells and their various applications. (18.75)

Q6 Discuss the amphibian metamorphosis. Explain the hormonal control of metamorphosis. Elaborate the steps involved in In-vitro fertilization (IVF). (18.75)