



Seat No. \_\_\_\_\_

**HO-003-1014020**

**Second Year B. Sc. (Sem. IV)  
(W.E.F. 2016) Examination**

**April - 2023**

**Zoology : Paper - Z - 04  
(Old Course)**

**Faculty Code : 003**

**Subject Code : 1014020**

**Time :  $2\frac{1}{2}$  / Total Marks : 70**

**Instructions :**

- (1) Draw neat and labeled diagram wherever necessary.
- (2) Figures to the right side indicate full marks for the questions.

- 1 (a) Write the answers in short : 4
- (1) Under which class, Siren has been classified ?
  - (2) Archaeopteryx connect Reptiles and \_\_\_\_\_ class.  
(Fill the blank)
  - (3) By which name Flightless birds are known ?
  - (4) By which common name Platypus is known.
- (b) Write answers in short : 2
- (1) What is short classification of Hyla ?
  - (2) Write main salient features of Class Reptile.
- (c) Write answers in short : 3
- (1) Explain main features of Archaeopteryx.
  - (2) Describe Retitae.
- (d) Explain : 5
- (1) Draw Classification Chart of Chordate up to class with example.
  - (2) Describe Platypus as Connective link.

- 2 (a) Write the answers in short : 4
- (1) Write any one name of Migratory fish.
  - (2) Name the respiratory organ of Calotes.
  - (3) Write any two names of Poisonous Snake.
  - (4) Name the snake species, which scientifically call as Naja nana.
- (b) Write answers in short : 2
- (1) Describe First Aid treatment for Snake bite.
  - (2) Write identification characteristics of Krait.
- (c) Write answers in short : 3
- (1) Explain Anadromous migration in fishes.
  - (2) Draw labeled diagram of Male Reproductive system in Calotes.
- (d) Explain : 5
- (1) Describe Digestive System of Calotes.
  - (2) Describe differences between poisonous and nonpoisonous snakes.
- 3 (a) Write the answers in short : 4
- (1) What is meaning of the word – ‘Isolecithal Egg’.
  - (2) Which type of Cleavage found in Chick Embryo ?
  - (3) Write any two names of Nitrogenous waste produced from animal body.
  - (4) Which unit is basic functional unit in Kidney ?
- (b) Write answers in short : 2
- (1) Describe Hormones of Ovary.
  - (2) Explain any one type of Cleavage.
- (c) Write answers in short : 3
- (1) Draw only labeled figure of Nephron.
  - (2) Describe types of Eggs according to Amount of Yolk.
- (d) Explain : 5
- (1) Describe physiology of urine formation.
  - (2) Explain about Menopause.

- 4 (a) Write the answers in short : 4
- (1) How many Pairs of chromosomes are present in Human ?
  - (2) Which types are found in Giant Chromosomes ?
  - (3) Which particles are found in Paramecium ?
  - (4) What is full form of PKU ?
- (b) Write answers in short : 2
- (1) What is DNA Finger Printing ?
  - (2) Explain Sex Determination in Drosophilla.
- (c) Write answers in short : 3
- (1) Describe Alkaptonuria.
  - (2) Explain anyone type of Giant Chromosome.
- (d) Explain : 5
- (1) Describe types of Chromosome according to Centromere position.
  - (2) Explain Cytoplasmic Inheritance.
- 5 (a) Write the answers in short : 4
- (1) By which name formation of Species is known ?
  - (2) What is meaning of Homologous organs ?
  - (3) Which Molluscan is producing Pearl ?
  - (4) Under which phylum, Prawn has been classified ?
- (b) Write answers in short : 2
- (1) Describe Analogous organs.
  - (2) What is Vestigial Organs ? Explain in brief.
- (c) Write answers in short : 3
- (1) Explain the Mechanism of Isolation.
  - (2) Describe formation of Pearl.
- (d) Explain : 5
- (1) Describe Speciation.
  - (2) Describe Bombay duck fisheries with fishing gears.
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