



Seat No. _____

HR-20

B. Sc. (Sem. II) (W.E.F.-2019) Examination

April – 2023

Zoology : Z-02

(New Course)

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

Instructions :

- (1) Illustrate Figures with neat and clean diagram.
- (2) Figure to right side show full mark of questions.

- 1 (a) Give answers of following questions : 4
- (1) In which Subphylum, Notochord present in head and persist up to the body length ?
 - (2) Write any two examples of Bony fishes.
 - (3) Under which class Skink (Mabuia) has been classified ?
 - (4) Which Exoskeleton is present in Aves ?
- (b) Answer any one out of two : 2
- (1) Write down any four characters of class Aves.
 - (2) Classify sea-horse up to its class.
- (c) Answer any one out of two : 3
- (1) Classify Bufo with its main characters.
 - (2) Write general characters of class Reptile.
- (d) Answer any one out of two : 5
- (1) Describe salient features of class Mammals.
 - (2) Draw classification chart of Chordates upto examples.

- 2 (a) Give answers of following questions : 4
- (1) Write definition of Cleavage.
 - (2) In amphioxus, Mayotomes are found in _____ shape.
 - (3) What is scientific name of Amphioxus ?
 - (4) Diameter of ovum of amphioxus is _____.
- (b) Answer any one out of two : 2
- (1) Describe Early cleavage in Amphioxus.
 - (2) Draw only labelled diagram of Amphioxus Blastula.
- (c) Answer any one out of two : 3
- (1) Describe fertilization process in Amphioxus.
 - (2) Explain Endostyle in Amphioxus.
- (d) Answer any one out of two : 5
- (1) Explain digestive system in Amphioxus.
 - (2) Describe Gastrulation process in amphioxus.
- 3 (a) Give answers of following questions : 4
- (1) Oxyntic cell are present in _____.
 - (2) Which enzyme is present in Saliva ?
 - (3) What is full form of R.B.C. ?
 - (4) In which organ Hepatic cells are present ?
- (b) Answer any one out of two : 2
- (1) Digestion of Lipid.
 - (2) Write structure and function of W.B.C.
- (c) Answer any one out of two : 3
- (1) Describe Absorption of carbohydrate.
 - (2) Draw and label diagram of histological structure of Pancreas.
- (d) Answer any one out of two : 5
- (1) Describe digestion in Intestine.
 - (2) Describe histological structure of stomach.

- 4 (a) Give answers of following questions : 4
- (1) Where the Khijadia Bird Sanctuary is located ?
 - (2) Write any two examples of Human Integumentary system.
 - (3) What is scientific name of Asiatic Lion ?
 - (4) In which class of Chordates, some glands are present in Skin ?
- (b) Answer any one out of two : 2
- (1) Write general introduction to wild life.
 - (2) Describe Horns.
- (c) Answer any one out of two : 3
- (1) What is difference between National Parks and Sanctuaries?
 - (2) Describe Sweat gland.
- (d) Answer any one out of two : 5
- (1) Describe Marine National Park with its flora and fauna.
 - (2) Explain Gir National park.
- 5 (a) Give answers of following questions : 4
- (1) What is meaning of Spermatogenesis ?
 - (2) In which animals Estrus cycle is physiological process ?
 - (3) From where Progesterone is secreted ?
 - (4) What is Average Age-range of Menopause ?
- (b) Answer any one out of two : 2
- (1) Describe Spermatogenesis.
 - (2) Which factors are affecting the Estrous cycle ?
- (c) Answer any one out of two : 3
- (1) Explain short note on Estrus cycle physiology.
 - (2) Which symptoms are found during pre-menopause phase ?
- (d) Answer any one out of two : 5
- (1) Describe main symptoms of Menopause.
 - (2) Explain Oogenesis.