



DBX-20

Seat No. _____

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

July - 2022

Zoology : Paper - Z-02

Time : $2\frac{1}{2}$ Hours]

[Total Marks : **70**

- Instructions :** (1) Draw neat and labelled diagram wherever necessary.
(2) Figures to the right side indicate full marks for the question.
(3) Attend all five questions.

- 1 (a) Answer the following questions in short : **4**
- (1) Which sub-phylum having notochord well developed ?
 - (2) Herdmania is belongs to which class of Urochordata ?
 - (3) Name division having no jaws.
 - (4) Which class of vertebrates is with an exoskeleton of feathers ?
- (b) Answer any one of the following question : **2**
- (1) Explain Notochord.
 - (2) Write any four characters of Urochordata.
- (c) Answer any one of the following question : **3**
- (1) Write characters of Reptiles.
 - (2) Write characters of electric ray-fish.
- (d) Answer any one of the following question : **5**
- (1) Write the characters of cephalochordate.
 - (2) Draw classification chart of chordates upto its class with examples.

- 2 (a) Answer the following questions in short : 4
- (1) After the fourth cleavage of eggs how many cells occur ?
 - (2) How many gonads are there in each side of Amphioxus ?
 - (3) _____ type of cleavage occurs in fertilized egg of Amphioxus.
 - (4) In Amphioxus the fertilization is _____.
- (b) Answer any one of the following questions : 2
- (1) Explain ovum of Amphioxus.
 - (2) Explain spawning in Amphioxus.
- (c) Answer any one of the following questions : 3
- (1) Describe feeding process of Amphioxus.
 - (2) Draw labelled diagram of external feature of amphioxus.
- (d) Answer any one of the following question : 5
- (1) Describe Gastrulation in Amphioxus.
 - (2) Explain cleavage in Amphioxus.
- 3 (a) Answer the following questions in short : 4
- (1) Write examples of complex carbohydrates.
 - (2) Name the two types of Leucocytes.
 - (3) Name the inner most layer of stomach wall.
 - (4) Goblet cells are found in the histological structure of _____.
- (b) Answer the following questions : 2
- (1) Explain Neutrophils.
 - (2) Write function of mammalian liver

- (c) Answer the following questions : 3
- (1) Explain digestion in Intestine.
 - (2) Explain blood platelets.
- (d) Answer the following question : 5
- (1) Explain blood components in brief.
 - (2) Explain histological structure of Pancreas.
- 4 (a) Answer the following questions in short : 4
- (1) What is scientific name of Asiatic lion ?
 - (2) Where the Khijadiya bird sanctuary is located ?
 - (3) Total area of Gir national park is _____.
 - (4) _____ are enlarged Keratinized plates on the ends of ungulate digits.
- (b) Answer the following questions : 2
- (1) Describe Claws.
 - (2) Describe fauna of Gir National park.
- (c) Answer the following questions : 3
- (1) Describe digital nail and tips.
 - (2) Describe hooves with example.
- (d) Answer the following questions : 5
- (1) Describe the causes of depletion of wild life.
 - (2) Describe Kutchh desert wild life sanctuary.
- 5 (a) Answer the following questions in short : 4
- (1) In mammals the first part of oogenesis starts in the _____.
 - (2) What is the average age of Menopause ?
 - (3) Define Estrus cycle.
 - (4) Name the three phase of Menopause.

- (b) Answer the following question : **2**
- (1) Explain Gametogenesis.
 - (2) Write symptoms of Menopause.
- (c) Answer the following question : **3**
- (1) Explain the phases of Menopause.
 - (2) Write causes of Menopause.
- (d) Answer th following question : **5**
- (1) Describe Spermatogenesis in brief.
 - (2) Explain Oogenesis in brief.
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