



**DAK-003-1014020**

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

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

**April - 2022**

**Z-04 : Zoology**

*(Old Course)*

**Faculty Code : 003**

**Subject Code : 1014020**

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

[Total Marks : 70

- Instructions :** (1) Figures to the right side indicates full marks of the questions.  
(2) Illustrate your answer with neat and labelled diagrams.

- 1 (A) Objective type question : 4  
(1) Any two example of cephalochordate animal.  
(2) Any two character of cyclostomata.  
(3) Any two reptilian character of Archaeopteryx.  
(4) Which animal is known as connecting link between Aves and mammals ?
- 1 (B) Answer in brief : (Any 1 out of 2) 2  
(1) Any four character of Class Reptiles.  
(2) Any four character of Amphibia.
- 1 (C) Answer in detail : (Any 1 out of 2) 3  
(1) Classify Parrot with reasons.  
(2) Difference between bony fish and cartilaginous fish.
- 1 (D) Write a note on : (Any 1 out of 2) 5  
(1) Salient features of class Aves.  
(2) Salient features of class Mammals.

- 2** (A) Objective type questions : **4**
- (1) Define Anadromous migration.
  - (2) Name any two poisonous snake.
  - (3) Calotes Belongs to Which Class ?
  - (4) Which artery supply blood to kidney in Calotes?
- 2** (B) Answer in brief : (Any 1 out of 2) **2**
- (1) Write note on anti venom.
  - (2) Anadromous migration.
- 2** (C) Answer in detail : (Any 1 out of 2) **3**
- (1) First aid treatment of snake bite.
  - (2) Describe any two poisonous snakes.
- 2** (D) Write a note on : (Any 1 out of 2) **5**
- (1) Female Urinogenital system of Calotes.
  - (2) Digestive system of Calotes.
- 3** (A) Objective type questions : **4**
- (1) What is microlecithal egg ?
  - (2) What is the average age of menopause in female?
  - (3) Which hormones are secreted by Testes ?
  - (4) Name the functional unit of Kidney.
- 3** (B) Answer in brief : (Any 1 out of 2) **2**
- (1) Which nitrogenous waste excreted in Urine ?
  - (2) Function of Estrogen hormone.
- 3** (C) Answer in detail : (Any 1 out of 2) **3**
- (1) Explain glomerulus filtration.
  - (2) Symptoms of Menopause.
- 3** (D) Write a note on : (Any 1 out 2) **5**
- (1) Explain types of cleavage.
  - (2) Structure of Nephron and control of renal function.

- 4 (A) Objective type questions : 4
- (1) How many types of chromosome according to centromere ?
  - (2) Define Giant chromosome.
  - (3) Which factor effect on sex determination in Bonelia?
  - (4) Who discovered Polytene chromosome ?
- 4 (B) Answer in brief : (Any 1 out 2) 2
- (1) Draw labeled diagram of chromosome.
  - (2) Symptoms of sickle-cell anemia.
- 4 (C) Answer in detail : (Any 1 out 2) 3
- (1) Explain Lampbrush chromosome.
  - (2) Explain Albinism
- 4 (D) Write a note on : (Any 1 out of 2) 5
- (1) Explain cytoplasmic inheritance with example.
  - (2) Sex determination in Human being and Drosophila.
- 5 (A) Objective type questions : 4
- (1) Define Speciation.
  - (2) In which region of Gujarat Promfret is found ?
  - (3) Define Analogus organ.
  - (4) How many pairs of Aortic arch present in Lamprey?
- 5 (B) Answer in brief : (Any 1 out of 2) 2
- (1) Define Isolation.
  - (2) Formation of coacervates.
- 5 (C) Answer in detail : (Any 1 out of 2) 3
- (1) Explain evolution of Man in short.
  - (2) Pearl oyster fisheries.
- 5 (D) Write a note on : (Any 1 out of 2) 5
- (1) Comparative anatomy of Aortic arch in Reptiles and Aves with Diagram.
  - (2) Explain Isolation and types of Isolation.