



**AAT-003-001424**

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

**Second Year B. Sc. (Sem. IV) (CBCS) Examination**

**April / May – 2016**

**Zoology : Paper - Z-401A**

**Faculty Code : 003**

**Subject Code : 001424**

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

[Total Marks : 70

- Instructions :** (1) Draw neat and labelled diagrams wherever necessary.  
(2) Figures to the right side indicate total marks of the question.  
(3) All questions are compulsory.

1 Select the most appropriate answer from the four options provided: **20**

- (1) Which layer separate Albumin and Yolk in chick embryo?  
(A) Viteline layer (B) Chalazae  
(C) Nucleus of Pander (D) Letebra
- (2) Poulorum (Fowl's white diarrhea) is caused by  
(A) Virus (B) Protozoa  
(C) Nematode (D) Bacteria
- (3) Symptoms of Green diarrhea is caused by  
(A) Poulorum (B) Tape-worm  
(C) Ranikhet (D) None of these
- (4) In which of the following snakes, Loreal pit is present?  
(A) Krait (B) Pit viper  
(C) King cobra (D) Cobra
- (5) For histological sectioning, useful instrument is  
(A) Microtome (B) Microchip  
(C) Microscope (D) Microsome

- (6) Axolotal larva belongs to class  
 (A) Amphibia (B) Chondrichthies  
 (C) Reptilia (D) Ostichthies
- (7) Testudo belongs to which class ?  
 (A) Amphibia (B) Reptilia  
 (C) Aves (D) Mammals
- (8) Head scale small, Head triangular, No loreal pit, Snake is  
 (A) Non Poisonous  
 (B) Non Poisonous OR Poisonous  
 (C) Poisonous  
 (D) Examine further
- (9) Which respiratory pigment is present in Human?  
 (A) Oxygen (B) Heparin  
 (C) Hemoglobin (D) Haemocyanin
- (10) Which animal is not found in India ?  
 (A) Elephant (B) Cheetah  
 (C) Loris (D) Snow leopard
- (11) Which of the following enzymes digests Lipid?  
 (A) Amylase (B) Trypsin  
 (C) Lipase (D) Pepsin
- (12) Which cell secretes Insulin in pancreas ?  
 (A)  $\beta$  Cell (B)  $\delta$  Cell  
 (C)  $\alpha$  Cell (D) None of these
- (13) Frog is  
 (A) Viviparous (B) Oviparous  
 (C) Ovoviviparous (D) None of these
- (14) How many pairs of gills pouches containing gill in Scoliodon.  
 (A) 5 (B) 7  
 (C) 3 (D) 2
- (15) How many cranial nerves are there in Scoliodon ?  
 (A) 10 (B) 12  
 (C) 14 (D) 16

- (16) How many chambered heart is of Calotes?  
 (A) 3 (B) 4  
 (C) 2 (D) 6
- (17) Which scales are found in primitive ray finned fishes ?  
 (A) Placoid scales (B) Cycloid scales  
 (C) Ctenoid scales (D) Ganoid scales
- (18) Which scales occur in a majority of bony fishes ?  
 (A) Placoid scales (B) Cycloid scales  
 (C) Ctenoid scales (D) Ganoid scales
- (19) Bowman's capsule + glomerulus = known as  
 (A) Malpighian body (B) Henley's loop  
 (C) Collecting tubule (D) tubule
- (20) How many cranial nerves are there in Calotes ?  
 (A) 10 (B) 12  
 (C) 14 (D) 16

- 2** (A) Write answers of any **three** out of six : **6**
- (1) Note on Pomfret.
  - (2) Salient features of class Amphibia.
  - (3) Classify testudo (Giant Turtle) giving reasons.
  - (4) Fertilization process in frog.
  - (5) Ampulae of Lorenzini.
  - (6) Give a brief about snow leopard.
- (B) Write answers any three out of six **9**
- (1) Write notes on Cobra snake.
  - (2) General characters of class mammalia.
  - (3) Histological structure of mammal's kidney.
  - (4) Types of Heterotrophic nutrition.
  - (5) Notes on threatened animal - Asiatic Lion.
  - (6) Gastrula stage in frog embryo.

- (C) Write answers any two out of five : 10
- (1) Digestive system of scoliodon – only Labelled diagram.
  - (2) Write notes on 'Poulorum' chick disease.
  - (3) Structure of egg of Hen.
  - (4) Key to identify poisonous from non poisonous snakes.
  - (5) Write histological techniques for preparation of biological material, fixing, embedding and sectioning, staining and mounting.
- 3 (A) Write answers any three out of six : 6
- (1) Structure of sperm of frog.
  - (2) Blastula stage in frog embryo.
  - (3) Classify Myxine giving reasons.
  - (4) General characters of class Aves.
  - (5) Structure of fish scale ' Placoid'
  - (6) Note on wild life conservation.
- (B) Write answers any three out of six : 9
- (1) Nutritive value of chick egg.
  - (2) Write composition of blood.
  - (3) Note on pearl oyster.
  - (4) Histological structure of mammal's Thyroid gland.
  - (5) Structure of fish scale Cycloid scales.
  - (6) Explain formation of urine.
- (C) Write answers any two out of five : 10
- (1) Write note on Bombay duck fisheries.
  - (2) Write note on 'Ranikhat' chick disease.
  - (3) Function of blood cells.
  - (4) Explain Digestive system of Calottes.
  - (5) Write note on scope & importance of Biotechnology.