



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 **20** provided:

- (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

(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.