



**NBG-003-10120020** Seat No. \_\_\_\_\_

**First Year B. Sc. (Sem. II) (CBCS) Examination**

**April / May - 2017**

**Zoology : Z - 02**

*(New Course)*

**Faculty Code : 003**

**Subject Code : 10120020**

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.

- 1 (A) Objective type questions : 4
- (1) Jaws bearing animal belongs to \_\_\_\_\_ division.
  - (2) Give the name of phylum which bears triploblastic pseudocoelomate animals?
  - (3) Which type of fertilization occurs in Amphioxus?
  - (4) Which type of cleavage occurs in fertilized egg of Amphioxus?
- (B) Answer in brief : (any **one** out of two) 2
- (1) Classify amphioxus.
  - (2) Draw a diagram of unfertilized ovum of Amphioxus.
- (C) Answer in detail : (any **one** out of two) 3
- (1) Describe general characters of Amphibia.
  - (2) Draw a diagram of T.S through Pharynx in Amphioxus.
- (D) Answer in detail : (any **one** out of two) 5
- (1) Draw a chart of chordate classification with example.
  - (2) Explain digestion in Amphioxus.

- 2 (A) Objective type questions : 4
- (1) Give the example of Multiple Allele.
  - (2) Which type of Antigen are present in A, B, AB and O blood group.
  - (3) Who discovered the types of blood group ?
  - (4) In which animal Rh factor was first invented ?
- (B) Answer in brief : (any **one** out of two) 2
- (1) Characters of Multiple Allele.
  - (2) What are the statements of Lamarkism theory of Evolution?
- (C) Answer in detail : (any **one** out of two) 3
- (1) What are the statements of Darwinism theory of evolution?
  - (2) Explain Erythroblastosis foetalis.
- (D) Answer in detail : (any **one** out of two) 5
- (1) Explain Phylogeny of horse.
  - (2) Explain Neo-darwinism theory of evolution.
- 3 (A) Objective type question : 4
- (1) Which enzyme digests carbohydrate, lipid and nucleic acid in pancreas?
  - (2) What are the components of gastric juice?
  - (3) Which type of protein is found in R.B.Cs?
  - (4) Which ion is necessary for the coagulation of blood?
- (B) Answer in brief : (any **one** out of two) 2
- (1) Define digestion.
  - (2) Define gametogenesis.
- (C) Answer in detail : (any **one** out of two) 3
- (1) Explain spermeogenesis.
  - (2) What are the components of blood?
- (D) Answer in detail : (any **one** out of two) 5
- (1) Describe oogenesis in detail.
  - (2) Explain absorption in intestine.

- 4 (A) Objective type questions : 4
- (1) Give the name of any two animals which are pathogenic to animals.
  - (2) Give the name of two parasitic animals.
  - (3) What is brooder?
  - (4) Give the name of fishes are found in aquarium.
- (B) Answer in brief : (any **one** out of two) 2
- (1) Draw a diagram of filarial worm.
  - (2) Systematic position of Pin worm.
- (C) Answer in detail : (any **one** out of two) 3
- (1) General characters of guinea worm with treatment.
  - (2) Control and treatment of Filarial worm.
- (D) Answer in detail : (any **one** out of two) 5
- (1) Describe the poultry apparatus are used in poultry farm.
  - (2) Describe the essential parts of fresh water aquarium.
- 5 (A) Objective type questions : 4
- (1) Menstrual cycle occurs for \_\_\_\_\_ days.
  - (2) Amphibians are having \_\_\_\_\_ chambered heart.
  - (3) Venous heart is found in which animal?
  - (4) Estrus cycle occurs in \_\_\_\_\_.
- (B) Answer in brife : (any **one** out of two) 2
- (1) Give the name of epidermal glands.
  - (2) Internal structure of Heart. (Diagram only)
- (C) Answer in detail : (any **one** out of two) 3
- (1) Describe digital tips and claws with example.
  - (2) Describe Estrous cycle.
- (D) Answer in detail : (any **one** out of two) 5
- (1) Describe evolution of Heart'.
  - (2) Describe Menstrual cycle in mammals.