# First Semester M. Sc. I. (CBCS) Examination

## **ZOOLOGY**

Paper - II

(Animal Structure and Function-Chordata)

P. Pages: 3

Time: Three Hours]

[Max. Marks: 80

Note: (1) All questions are compulsory.

- (2) All questions carry equal marks.
- (3) Draw well labelled diagram wherever necessary.
- 1. Describe in detail operative principles of ICZN.

## OR

Write in detail different types of taxonomic keys with their merits and demerits.

- 2. Explain the followings:—
  - (a) Functions of Skin.
  - (b) Visceral skeleton in Fishes.
  - (c) Autostylic jaw suspensorium.
  - (d) Digestive system of Amphioxus.

### OR

- (e) Structure of mammalian skin.
- (f) Liver in mammal.
- (g) Endoskeleton in Amphioxus.
- (h) Structure of tooth in mammals. 16
- 3. Give an account of the followings :-
  - (i) Gills in Fishes.
  - (j) Functional organization of mammalian lung.
  - (k) Haemopoiesis.
  - (l) Larynx.

# OR

- (m) Functions of Blood.
- (n) Exchange of gases in Lungs of mammal.
- (o) Swim bladder in Fishes.
- (p) Lymph organs.

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4. Describe archinephros, pronephros, mesonephros and metanephros in vertebrates.

#### OR

Describe in detail osmoregulation in freshwater and marine water fishes.

- 5. Explain the followings:—
  - (q) Causes and significance of migration in birds.
  - (r) Adaptive radiation in mammals.
  - (s) Electroreception.
  - (t) Bat Echolocation.

### OR

- (u) Anadromous and caladromous migration in Fishes.
- (v) Lateral line system in Fishes.
- (w) Aquatic adaptations in mammals.
- (x) Morphological adaptations for echolocation.

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