

AU-231

M.Sc. Semester—I (C.B.C.S. Scheme) Examination

ZOOLOGY

(Animal Structure and Function (Chordata))

Paper—II

Time : Three Hours]

[Maximum Marks : 80

- Note :—** (1) All questions are compulsory.
 (2) All questions carry equal marks.
 (3) Draw well labelled diagrams wherever necessary.

1. Describe origin of reproductive isolation. 16

OR

Describe International Code of Zoological Nomenclature (ICZN) and its operative principles. 16

2. Explain the following :

- (a) Glands – derivative of skin
- (b) Dentition in mammal
- (c) Autodiastyle jaw suspensorium
- (d) Liver of mammals. 16

OR

- (e) Endoskeleton in *Herdmania*
- (f) General structure of mammalian skin
- (g) Digestive system of *Amphioxus*
- (h) Visceral skeleton in fishes. 16

3. Give an account of the following :

- (i) Characteristics of Respiratory Surface
- (j) Accessory respiratory organ in *Anabas*
- (k) Larynx
- (l) Blood. 16

OR

- (m) Gills in Bony fishes
- (n) Lymph
- (o) Aerodynamics of lungs
- (p) Functional organization of mammalian lung. 16

4. Describe Archinephros, Pronephros, Mesonephros and Metanephros Kidneys. 16

OR

Explain organ of hearing and balance. 16

5. Describe the following :

(q) Bat echolocation

(r) Neuromast organ

(s) Aquatic adaptations in mammals

(t) Migration in Birds. 16

OR

(u) Electoreception

(v) Flight adaptations in mammal

(w) Anadromous Migration in fishes

(x) Adaptive radiation for cursorial life 16