

AU-230

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

ZOOLOGY

Animal Structure and Function (Non-Chordata)

Paper—I

Time : Three Hours]

[Maximum Marks : 80

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

1. Give an account of the following :

- (a) Concepts of biosystematics
- (b) Phenetic classification
- (c) Dimensions of speciation
- (d) Parsimony method of classification.

OR

- (e) Phylogram
- (f) Cladistic method of classification
- (g) Species concepts
- (h) Molecular taxonomy.

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2. Describe feeding and digestion in Bryozoans and Echinodermata.

OR

Describe hydrostatic evasive movements in ctenophores and hydrostatic selection in annelids.

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3. Describe respiratory pigments in invertebrates.

OR

Describe excretory structures and functions in Annelids.

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4. Explain the following :

- (i) Cephalopod's nervous system
- (j) Structure of compound eye in insects
- (k) Chemotaxis in insects
- (l) Nervous system of Echinodermata.

OR

- (m) Nervous system of insects
- (n) Mechanoreceptor
- (o) Chemoreception in insects
- (p) Nervous system in annelida.

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5. Give an account on the following :

- (q) Parthenogenesis
- (r) Hermaphroditism
- (s) Hormones of reproduction in Arthropoda
- (t) Larva of Porifera.

OR

- (u) Sexual reproductive mechanism
- (v) Reproductive structures in Porifera
- (w) Hormones of reproduction in Annelida
- (x) Larvae of Platyhelminthes.

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