

NP — Zool (1)

2015-17

(1st Sem)

Time : 3 hours

Full Marks : 70

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

*Answer **five** questions in which Q. Nos. 1 and 2 are compulsory.*

1. Select the correct answer of the following :

2×10 = 20

(i) The venom of viper effects on :

- (a) Circulatory system
- (b) Nervous system
- (c) Respiratory system
- (d) Excretory system

(ii) The function of contractile vacuole is increased when :

- (a) It is needed to remove waste products
- (b) The concentration of water outside is higher than the animal body
- (c) It has stopped feeding
- (d) The cell membrane is permeable to water

(iii) The largest cranial nerve is :

- (a) Facial
- (b) Optic
- (c) Mandibular
- (d) Vagus

(iv) Respiratory appendage of pupa is called :

- (a) Gills
- (b) Trumpets
- (c) Siphon
- (d) Trachea

(v) Mammalian brain differ from an amphibian brain having :

- (a) Cerebellum
- (b) Corpus callosum
- (c) Olfactory lobes
- (d) Hypothalamus

(vi) Eukaryotic flagella is made up of :

- (a) Vimetin
- (b) Flagellin
- (c) Dyenien
- (d) Tubulin

(vii) Finches of Galapagos Islands means :

- (a) Amphibians
- (b) Reptiles
- (c) Birds
- (d) Fishes

(viii) The immobile cytoplasmic ciliary extensions from the cell is called :

- (a) Sterocilia
- (b) Kinocilia

(c) Mitocilia

(d) None of the above

(ix) How many temporal vacuities are found in the skull of the representatives of subclass Lepidosauria ?

- (a) Two
- (b) Three
- (c) Four
- (d) None of the above

(x) True coelom is the space between the alimentary canal and body wall enclosed by layers of : <http://www.brabuonline.com>

- (a) Mesoderm on both sides
- (b) Ectoderm on both sides
- (c) Endoderm on one side and ectoderm on the other
- (d) Mesoderm on one side and ectoderm on the other

2. Write short notes on any four of the following :

5×4 = 20

- (a) Chemical composition of snake venom

(b) **Coelomic divisions of metazoa**

(c) **Osmoregulators**

(d) **Peripheral nervous system**

(e) **Ciliary or Flagellar movement**

3. **Classify living amphibian upto orders with distinctive characters and examples (including Indian species) with discussion on the classification.** <http://www.brabuonline.com> **10**

4. **Name the cranial nerves, their place of origin and branches with distribution in mammals.** **10**

5. **What is osmoregulation ? Describe, in detail, the physiological adaptations involved in osmoregulation in protozoa. Why is osmoregulation important ?** **10**

6. **Give an account of different types of respiratory organs found in invertebrates and mechanism of respiration in mollusca** **10**

7. **Give an account of patterns of feeding and digestion in lower metazoans.** **10**