

This question paper contains 3 printed pages.]

Your Roll No.

1338

B.Sc. (Hons.) ZOOLOGY / II Sem. A

Paper II – ZOHT – 203

Biodiversity III – Chordata-II

Time : 3 Hours

Maximum Marks : 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

Answer **five** questions in all. Question No. 1 is compulsory.

1. (a) Distinguish between the following pair of words : **8**
- (i) Larynx and syrinx
 - (ii) Tangorecyptors & Algesireceptors.
 - (iii) Hyostyly & Craniostyly!
 - (iv) Mullerian and Wolffian duct.
- (b) State the exact location of the following : **6**
- (i) Uncinate process
 - (ii) Foramen ovale
 - (iii) Pessulus
 - (iv) Rete mirabile
 - (v) Organ of Corti
 - (vi) Zygosphenes

- (c) Define the following : 4
- (i) Splanchnocranium
 - (ii) Synovial joint
 - (iii) Pseudobranch
 - (iv) Corpora Quadrigemina
- (d) Indicate whether the following statements are True or False : 6
- (i) The hyomandibular cartilage is modified into malleus in Tetrapoda.
 - (ii) The reptilian skull has only one occipital condyle.
 - (iii) Foramen Ovale is present in Reptilian heart.
 - (iv) Synsacrum in birds is formed by the fusion of posterior vertebrae and pelvic girdle.
 - (v) Functional kidney of amphibians is opisthonephros.
 - (vi) Duplex uterus is found in Primates.
- (e) Draw a well labelled and neat sketch of L.S. of syrinx of bird. 3
2. Discuss the evolution of visceral arches in vertebrates. 12
3. Describe evolution of Auritic Arches in various groups of vertebrates. 12
4. (a) Discuss succession of Urogenital ducts in vertebrates. 8
- (b) Discuss the utility of lymphatic system to vertebrates. 4

5. (a) Give an account of swim bladder, and its functions in fishes. 6
- (b) Trace the evolution of pectoral girdle in vertebrates. 6
6. Describe the structure of Mammalian ear with suitable diagrams and discuss the physiology of hearing. 12
7. Write short notes on any **three** of the following : 4, 4, 4
- (i) Cranial nerves in Mammals
 - (ii) Autonomic N.S.
 - (iii) Jaw suspension
 - (iv) Classification of Receptors
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