

Bankim Sardar College

Semester IV Examination B.Sc. Hons

Subject: Zoology

Paper CCH08

Full marks 90

Answers of each group should be in separate answer-sheet Group – A (F.M. 10)

Answer all MCQ questions (10 x 1 = 10)

1. (i) Poison gland is located in--

- (a) Stratum corneum (b) Stratum compactum (c) Stratum spongiosum (d) None of the above

(ii) The Smallest chamber of ruminant stomach is-

- (a) Rumen (b) Reticulum (c) Omasum (d) Abomasum

(iii) The membrane which separates cement of teeth from jaw bone-

- (a) Mucous membrane (b) Pulp cavity (c) Periodontal membrane (d) None of the above

(iv) In Elasmobranch gills, gill pouches are separated by the thick inter-branchial septa or partitions. This type of gill is called as-

- (a) Hemibranch (b) Opercular gill (c) Holobranch (d) Septal gill

(v) The only unpaired air sac found in birds, is known as-

- (a) Clavicular (b) Abdominal (c) Interclavicular (d) Humeral

(vi) The inter-auricular septum bears an oval- shaped depression in mammalian heart, known as-

- (a) Fossa ovalis (b) Foramen ovale (c) Annulus ovalis (d) None of the above

(vii) In birds, which pair of aortic arches persist as right systemic artery-

- (a) 3rd pair (b) 4th pair (c) 6th pair (d) None of the above

(viii) In amphibians, early embryonic pronephros is usually succeeded by the larval mesonephros, which upon metamorphosis is replaced by-

- (a) Metanephros (b) Archenephros (c) Opisthonephros (d) None of the above

(ix) In which vertebrate, ova after fertilization, further receives a coating of double shell membrane and a calcareous shell-

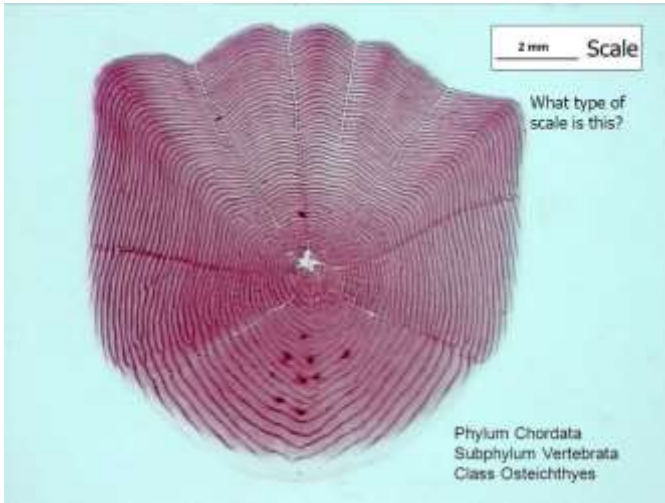
- (a) Fish (b) Reptile (c) Aves (d) Mammal

(x) Which cranial nerves is associated with taste and touch-

- (a) 5th (b) 9th (c) 10th (d) None of the above

2. Identify and write down the salient features of the following specimens:-

(i)

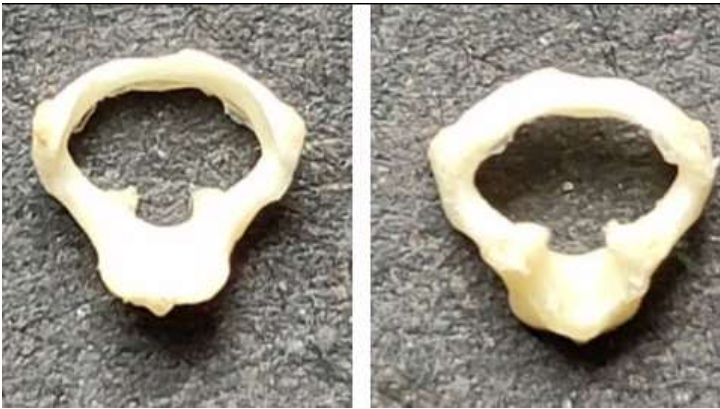


(A)

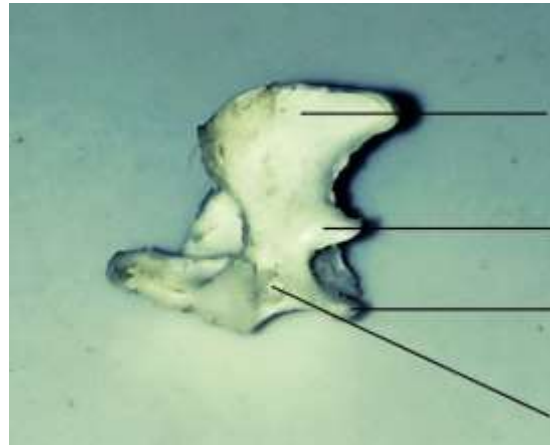


(B)

(ii)



(A)



(B)

(iii)



(A)



(B)

Group – C (F.M. 50)

Answer all the ten short type questions (10 x 2 = 20)

3. (i) What do you mean by retro-peristalsis?
- (ii) What do you mean by peptic nephridia?
- (iii) What is Lophodont? Give example.
- (iv) State two differences between septal and opercular gill.
- (v) State the function of syrinx in bird.
- (vi) What is Columnae carnae? Where does it occur?
- (vii) In mammals, mention the fate of fourth pair of systemic arch.
- (viii) What is cavity of 'Iter' or cerebral aqueduct?
- (ix) What is Os-cordis? Where do you find?
- (x) What is glenoid cavity? What is coraco-scapular angle?

Answer any six questions (6 x 5 = 30)

- 4.
- (i) Briefly describe the process of rumination with suitable diagram indicating course of food.
- (ii) What do you mean by accessory air sacs? Give example. Mention four important functions of air sac.
- (iii) Briefly describe the modification of aortic arches in birds with suitable diagram.
- (iv) State all the differences between male and female urinogenital system in Amphibia.
- (v) Write down the name, origin, distribution, nature and functions of Xth cranial nerve.
- (vi) Briefly describe the autostylic jaw suspension with labelled diagram.
- (vii) What do you mean by Metanephros? State two differences between pronephros and opisthonephros.
- (viii) Write a short note on 'Organ of Jacobson'.