



HAD-003-001641 Seat No. _____

Third Year B. Sc. (Sem. VI) Examination

June / July – 2017

Zoology : Z-601

(Functional Anatomy of Chordates & Comparative)
(New Course)

Faculty Code : 003

Subject Code : 001641

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) Illustrate your answer with neat and labelled diagram.
(2) Figures to the right side indicate full marks of question.

1 Give the Answer for following questions : **20**

- (1) In structure of air bladder the red gland receives blood from _____ artery and empties into the _____ vein.
- (2) Anadromous migration refers to movement of fishes :
- (3) Which type of jaw suspension found in dipnoi?
- (4) _____ type of caudal fin is the characteristic of the majority of higher bony fishes.
- (5) Siren belongs to class _____, order _____ & sub order _____.
- (6) Which type of skull found in living reptiles?
- (7) Presence of median pineal eye is the characteristic of _____.
- (8) In pigeon _____ artery carries blood to the wings.
- (9) How many air sacs are found in pigeon?
- (10) _____ is the connecting link between reptiles and aves.
- (11) Give any two example of Group Ratitae.
- (12) Some birds shows the most familiar migration from north to south and vice versa is known as _____.

- (13) In Rat, _____ artery carries blood to the iliac and lumber region.
- (14) Presence of Tarsal spur in male is the typical character of _____.
- (15) Ventral abdominal pouch and epipubic bones is the characteristic of _____.
- (16) How many chambers are there in the heart of pises?
- (17) Presence of corpus callosum is the characteristic of _____ brain.
- (18) Which gland is found in male lizard?
- (19) In carnivores, last premolars in uppar jaw and first molar in lower jaw may have very sharp cusp & for cracking bones and shearing tendons are called _____.
- (20) Bats are included in order _____.

2 (a) Write any three out of **six** : **6**

- (1) Types of fins in fishes.
- (2) Scent gland and mammary gland.
- (3) Ratitae.
- (4) Neoteny.
- (5) Write a short note on primates.
- (6) Hybernation and Aestivation in amphibian.

(b) Write any three out of six : **9**

- (1) Parapsid and Diapsid skull.
- (2) Structure and function of air bladder in fishes.
- (3) Write a short note on marsupials.
- (4) Brain of pigeon.
- (5) Attachment of teeth and dentition of teeth in mammals.
- (6) Heart in reptiles.

- (c) Write any **two** out of five : **10**
- (1) Origin & evolution of brain in vertebrates and describe the brain of pisces.
 - (2) Venous system of Rat.
 - (3) Digestive system of Pigeon.
 - (4) Compare the Aortic arches of Pisces, Amphibians and Aves.
 - (5) Sphenodon as a living fossil & affinities of it.
- 3** (a) Write any three out of six : **6**
- (1) Types of air bladder in fishes.
 - (2) Archaeopteryx.
 - (3) Parental care of Amphibia with any two examples.
 - (4) Aortic arches in Reptiles.
 - (5) Write a short note on Chiroptera.
 - (6) Succession of teeth in vertebrates.
- (b) Write any three out of six : **9**
- (1) Migration in fishes.
 - (2) Female urinogenital system of Pigeon.
 - (3) Write a short note on Monotremata.
 - (4) Affinities of Dipnoi.
 - (5) Femoral gland, sebaceous gland and poisons gland in vertebrates.
 - (6) Sketch & label digestive system of Rat.

(c) Write any two out of five : 10

- (1) Origin & evolution of heart in vertebrates and describe the heart of Mammals.
 - (2) Arterial system of Rat.
 - (3) Types of teeth in mammals and give the dental formula of Got, Horse, Dog.
 - (4) Migration in Birds.
 - (5) Affinities of Urochordata.
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