



RX-003-001641

Seat No. _____

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

March - 2019

Z-601 : Zoology

(Functional Anatomy of Chordates & Comparative)

(Old Course)

Faculty Code : 003

Subject Code : 001641

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

[Total Marks : 70

- Instructions :** (1) Draw neat and labeled diagram wherever necessary.
(2) Numbers to the right side indicate full marks of the question.

1 Give the answer of following questions : **20**

- (1) Amphioxus belongs to which class?
- (2) Give any two important characters of tunicata.
- (3) Give the living fossil name
- (4) Which animal is Connecting link the class reptiles and aves.
- (5) Scientific name of Rat.
- (6) Which epidermal gland is found in a tail region of birds?
- (7) Define retrogressive metamorphosis?
- (8) How many air sacs are found in pigeon?
- (9) Which type of caudal Fin Found in Elasmobranch?
- (10) Which veins of Rat is collect blood from the lumber region.

- (11) How many chambers are there in the heart of Pisces?
- (12) Define catadromous migration in fish.
- (13) Some birds shows the most familiar migration from north to south and vice versa is known as.....
- (14) Gives two animals name of carnivore mammals.
- (15) Diencephalon is the part ofbrain.
- (16) Function of Gizzard in birds.
- (17) Dental formula of Dog.
- (18) Which type of kidney present in birds?
- (19) Smallest arteries are connected to smallest veins by is known as
- (20) 2-chambered single circuit venous hearts are found in.....

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

- (1) Dental formula of Horse and Goat.
- (2) Parental care in amphibia. (Direct)
- (3) Air bladder of fishes.
- (4) Explain order chiroptera.
- (5) Explain Mammary gland in brief.
- (6) Hibernation in Amphibiam.

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

- (1) Affinities of dipnoi.
- (2) Palate in birds. (any one)
- (3) Short note on Marsupials
- (4) Types of Migration in birds
- (5) Extinct reptiles.
- (6) Explain Anadromous migration in fish.

- (c) Write any two out of **five** : **10**
- (1) Arterial system of Rat.
 - (2) Accessory respiratory organ of fishes.
 - (3) Digestive system of pigeon.
 - (4) Dentition in mammals according to attachment with gum.
 - (5) Explain order urochordata, affinities and vertebrates.
- 3** (a) Write any three out of **six** : **9**
- (1) Explain Neotony in brief.
 - (2) Aestivation and Amphibia.
 - (3) Parental care in fishes
 - (4) Describe order insectivora.
 - (5) Describe scent gland.
 - (6) Pectene in pigeon.
- (b) Write any three out of **six** : **9**
- (1) Structure of pigeon heart.
 - (2) Brain of Rat. (Dorsal side)
 - (3) Explain ratitae.
 - (4) Describe aquatic mammals.
 - (5) Explain Pouched mammals.
 - (6) Types of features in Birds.
- (c) Write any two out of **five** : **10**
- (1) Temporal fossae.
 - (2) Comparative of heart in Amphibia and mammals.
 - (3) Comparative account of arotic arch. in Reptiles and Aves.
 - (4) Comparative account of kidney : Fishes and aves.
 - (5) Digestive system of rat.