



Seat No. _____

H-003-2016021

B. Sc. (Sem. VI) (W.E.F. 2019) Examination

April - 2023

**Functional Anatomy of Chordates & Comparative
Study : Z-601**

Faculty Code : 003

Subject Code : 2016021

Time : $2\frac{1}{2}$ / Total Marks : 70

Instructions :

- (1) Draw neat and labelled diagrams wherever necessary.
 - (2) Numbers to the right side indicates full marks of the questions.
- 1**
- (a) Answer the following questions : (Objective type questions) **4**
 - (1) Define Agantha division.
 - (2) How many species are recorded in chordate group. (approx)
 - (3) Amphioxus belongs to which class ?
 - (4) Any two examples of amphibians' animal.
 - (b) Answer in brief : (any one out of two) **2**
 - (1) General character of Cephalochordate - any four.
 - (2) Write three outstanding common traits in chordate group.
 - (c) Answer in detail : (any one out of two) **3**
 - (1) General characters of Aves - any six.
 - (2) General characters of Urochordata - any six.
 - (d) Write a note on : (any one out of two) **5**
 - (1) Classify with characteristics and reasons : Salpa and Lamprey.
 - (2) Classify with characteristics and reasons : Barbus and Porcupine.
- 2**
- (a) Answer the following questions : (Objective type questions) **4**
 - (1) Which, arteries in Rat carry de-oxygenated blood from heart to lungs ?
 - (2) Classify only Rat.
 - (3) What is Scientific name of Pigeon ?
 - (4) Function of Gizzard in birds.

- (b) Answer in brief : (any one out of two) 2
 (1) Only diagram with labelled : Brain of Rat.
 (2) Classify with reasons : Pigeon.
- (c) Answer in detail : (any one out of two) 3
 (1) Only Draw and labelled diagram of Digestive system of Pigeon.
 (2) Only draw and labelled diagram of Male reproductive system of Rat.
- (d) Write a note on : (any one out of two) 5
 (1) Explain in detail with figure : Venous system of Pigeon.
 (2) Explain in detail with figure : Arterial system of Rat.
- 3** (a) Answer the following questions : (Objective type questions) 4
 (1) Enlists the types of migrations in fishes.
 (2) Give the uses of fins in Pisces group.
 (3) Define Neotony in Amphibia.
 (4) Write two examples of parental care in fish.
- (b) Answer in brief : (any one out of two) 2
 (1) Function of swim bladder in fish.
 (2) What is Hibernation in Amphibia.
- (c) Answer in detail : (any one out of two) 3
 (1) Parental care in fish with two examples.
 (2) Notes on Neotony in Amphibia.
- (d) Write a note on : (any one out of two) 5
 (1) Affinities of Urochordata : with Higher Chordate.
 (2) Explain in detail Air Bladder of fishes.
- 4** (a) Answer the following questions : (Objective type questions) 4
 (1) What is Monotremes with examples ?
 (2) Examples of primates (any two).
 (3) Two examples of Carnivore animals.
 (4) Define seasonal migration in birds.
- (b) Answer in brief : (any one out of two) 2
 (1) Diapsida in Reptiles.
 (2) Define cetacean with examples.

- (c) Answer in detail : (any one out of two) **3**
(1) Living fossils - Sphenodon.
(2) Types of claws in birds any two.
- (d) Write a note on : (any one out of two) **5**
(1) In detail types of beaks in birds.
(2) Temporal fossae in reptiles.
- 5** (a) Answer the following questions : (Objective type questions) **4**
(1) Any two comparative differences in Shark and Rat of heart.
(2) Write dental formula of Horse.
(3) Write dental formula of Dog.
(4) In Platypus which type of teeth is found ?
- (b) Answer in brief : (any one out of two) **2**
(1) Explain Dental formula in Pig.
(2) What are lophodont and teeth ?
- (c) Answer in detail : (any one out of two) **3**
(1) Comparative study of brain : Frog and Pigeon (any six)
(2) Types of teeth based on their attachments with jaw.
- (d) Write a note on : (any one out of two) **5**
(1) Comparative account of aortic arch : Shark, frog and Calotes.
(2) Comparative account of hearts : Calotes, Pigeon and Rat.
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