



NAM-003-001641 Seat No. _____

B. Sc. (Sem. VI) (CBCS) Examination

March / April - 2017

Z-601 : Zoology

(Functional Anatomy of Chordate & 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 the question.

1 Write Answers of short Questions : 20

- (1) The redix or lateral aorta between 3 and 4 arches persist as a vascular Connection terms _____ in amphibian.
- (2) Give the name of thick subcutaneous layers of fat in aquatic mammals.
- (3) Which type of parental care shown in stickle back and amia ?
- (4) Give only name of glands present in male reproductive system in rat.
- (5) Which type of kidney present in aves ?
- (6) Give name of any two monotremes.

- (7) Give dental formula of cow and dog.
- (8) Which type of 'Skull present in turtle?
- (9) Sea squirts belongs to which class,
- (10) What is Gynaecomastims?
- (11) Give the function of restiform bodies in elasmobranches.
- (12) Which Cetacean mammals also known as "Tiger of the sea" ?
- (13) Echo-apparatus present in which mammals.
- (14) Which compact mass of interlacing fine capillaries in air bladder ?
- (15) Different between Cycloid and Ctenoid scale.
- (16) Scientific name of rat.
- (17) Which era is known as Golden period of reptiles?
- (18) Which Marsupials is found in America?
- (19) Coccygeo-mesentric vein collect blood from which organ?
- (20) In urodels ductus botaii connect _____, _____ and _____ Aortic Arch.

2 (a) Write any three out of six :

6

- (1) Remex feather
- (2) Indirect method of parental care in amphibian (3)
Sweat gland
- (4) Types of teeth according to attachment with jaw.
- (5) Seasonal migration in birds.
- (6) Anadromous and catadromous migration.

- (b) Write any three out of six : 9
- (1) Caudal fin in fish.
 - (2) Neotony.
 - (3) Mode of flight in migration of birds.
 - (4) Extinct bird archaeopteryx.
 - (5) Anapsida and diapsida skulls.
 - (6) Short note on primate.
- (c) Write any two out of five: 10
- (1) Arterial system in rat.
 - (2) Affinities in Urochordata.
 - (3) Aquatic mammals.
 - (4) Air sac in pigeon.
 - (5) Comparative aortic arch in fish and aves.
- 3** (a) Write any three out of six : 6
- (1) Aestivation and hybernation,
 - (2) Uropygial gland.
 - (3) Types of air bladder according to Pneumatic duct.
 - (4) Pactene in pigeon.
 - (5) Partial migration in bird.
 - (6) Filoplume feather.
- (b) Write any three out of six: 9
- (1) Type of cheek teeth.
 - (2) Living fossil - Sphenodon.
 - (3) Structure of air bladder in fish.

- (4) Flying mammals.
- (5) Flightless bird.
- (6) Parapsida and synapsida skulls.

(c) Write any two out of five : **10**

- (1) Male reproductive system of pigeon.
 - (2) Short note on Dipnoi.
 - (3) Comparative structure of brain in reptiles and mammals.
 - (4) Pouched mammals.
 - (5) Internal structure of heart.
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