



ATN – 29

B.Sc. (Semester – V) Examination, October/November 2018

ZOOLOGY

Comparative Anatomy of Vertebrates

Duration : 2 Hours

Max. Marks : 80

**Instructions :** i) **All questions are compulsory.**

ii) **Figures to the right indicate full marks.**

iii) **Draw neat labelled diagrams wherever necessary.**

1. Answer **any four** of the following :

16

- a) Hyoid apparatus of reptile.
- b) Hyostylic jaw suspension.
- c) Digital structures in amniota.
- d) Structure of hair.
- e) Larval gills.
- f) Syrinx in birds.

2. Write brief notes on **any four** of the following :

16

- i) Heart of Bony fish.
- ii) Aortic arches in anuran amphibia.
- iii) Structure of a nephron.
- iv) Pronephros of anamniotes.
- v) Gray and white matter.
- vi) Terminal nerve.

3. A) Give a concise account of epidermal glands in amniotes.

6

OR

A) Compare the Amphibian integument with that of a Reptile.

6

B) Name the three embryonic components of the vertebrate skull. Differentiate each.

6

P.T.O.





4. A) Describe the structure of lungs in birds. 6

OR

A) Submit an account of gill structure in a cartilaginous fish. 6

B) Compare the heart of a reptile with that of a bird. 6

5. A) Discuss the basic plan of venous system in shark. 6

OR

A) Explain aortic arches in mammals. 6

B) Give an account of urinary bladder in vertebrates. 6

6. A) Discuss the comparative anatomy of the Opisthonephros. 6

OR

A) Give a brief account of Telencephalon in vertebrates. 6

B) Describe the Sympathetic nervous system. 6

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