

8241
M.Sc. IIIrd SEMESTER EXAMINATION, 2019
ZOOLOGY
Paper - I
VERTEBRATES

Time: Three Hours
Maximum Marks: 80

PART – A

[Marks: 20]

Answer all questions (50 words each).

All questions carry equal marks.

PART – B

[Marks: 40]

Answer five questions (250 words each).

Selecting one from each unit. All questions carry equal marks.

PART – C

[Marks: 20]

Answer any two questions (300 words each).

All questions carry equal marks.

PART – A

- Q.1 (i) Write two important characters of Placoderms?
- (ii) Give two examples of Extinct Vertebrates.
- (iii) Why do tadpoles growing in iodine deficient water, fail to grow into frogs?
- (iv) What evolved from amphibians?
- (v) How and when did the dinosaurs go extinct?
- (vi) How did tetrapods evolve?
- (vii) Why birds have different type of beaks?
- (viii) Give name of largest and smallest flightless bird.
- (ix) What is adaptive radiation? Give example.
- (x) Why is the Cenozoic Era called the age of Mammals?

PART – B

UNIT –I

- Q.2 What is a “monophyletic group”. Draw the vertebrate phylogeny.
- Q.3 What are the pharyngeal jaws? What is their function? What is unique about the pharyngeal jaws of the Moray Eel?

UNIT –II

- Q.4 Differentiate between: -
- (a) Neoteny and Paedogenesis
- (b) Anadromous and Catadromous migration

Q.5 Write short note on origin of Amphibia.

UNIT –III

Q.6 Give the classification of Archaeopteryx and its characteristics.

Q.7 Write short notes on:

(a) Living reptiles

(b) Dinosaurs

UNIT –IV

Q.8 Write short notes on –

(a) Palate in birds

(b) Theories of origin of flight

Q.9 Why do birds like the Ostrich and the Emu have wings though they cannot fly?

UNIT –V

Q.10 What were the major events in Cenozoic Era? Explain.

Q.11 Describe phylogenetic Evolution of Placenta.

PART – C

Q.12 Write an essay on Agnatha group.

Q.13 Write in brief the economic importance of Amphibians.

Q.14 Discuss the Evolution of terrestrial animals.

Q.15 Describe flight adaptation in birds.

Q.16 Write a note on origin and evolution of mammals.
