

Post Graduate Teaching Department of Zoology
An Autonomous Department of
Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
Programme: M. Sc. Zoology Semester -II (CBCS)
Theory Examination Summer-2023

Code and Name of Paper: PGZO2T1 Paper-2T1- Structure and Function of Vertebrates

Time: 3hrs

Maximum Marks: 60

Note

- 1. All the questions are compulsory.**
- 2. All questions carry equal marks.**
- 3. Draw well labelled diagrams and charts wherever necessary.**

Q.1 Explain in detail different theories of origin of chordates. **12**
OR

Write notes on-

- (a) Characteristic features and affinities of Urochordata.
- (b) General characteristics and affinities of Dipnoi.

Q.2 Describe the structure and functions of integument and its derivatives in vertebrates. **12**
OR

Write notes on-

- (a) Jaw suspension in vertebrates.
- (b) General characteristics and classification in Chelonia.

Q.3 Explain in detail evolution of kidney and excretion in vertebrates. **12**
OR

Write notes on-

- (a) Migration in birds.
- (b) General characters and adaptations in Cetacea.

Q.4 Describe in detail the structure and functions of autonomous nervous system in vertebrates. **12**
OR

Write notes on-

- (a) Evolution of heart in vertebrates.
- (b) Sense organs in vertebrates.

Q. 5 Write in brief on the followings: - **12**

- (a) Amocoetus larva.
- (b) Organs of respiration in Pisces
- (c) Adaptive radiation.
- (d) Ancestors of human.