# **Post Graduate Teaching Department of Zoology**

An Autonomous Department of RTM, Nagpur University, Nagpur M. Sc. Zoology Semester -II (CBCS-NEP)

**Theory Examination Summer-2024** 

Paper: 2T1, Structure and Function of Chordates

Time: 3 hrs. Maximum Marks: 60

## **Note:**

- 1. All questions are compulsory.
- 2. All questions carry equal marks.
- 3. Draw suitable diagrams wherever necessary.
- 1. Describe in detail the origin and ancestry of phylum chordata.

OR

#### Write notes on: -

- (a) Characteristic features and affinities of cephalochordata.
- (b) Development of amoecoetus larva.
- 2. Compare the organs and mechanism of respiration in pisces and amphibia.

OR

### Write notes on: -

- (a) Derivatives of integument in vertebrates.
- **(b)** Jaw suspension in vertebrates.
- **3.** Explain in detail evolution of kidney and excretion in vertebrates.

OR

## Write notes on: -

- (a) Origin of birds.
- **(b)** Aquatic and terrestrial adaptive radiations.
- **4.** Describe in detail the structure and functions of autonomous nervous system in vertebrates.

OR

## Write notes on: -

- (a) Evolution of heart in vertebrates.
- **(b)** Echolocation.

## 5. Write in brief on followings: -

- (a) Affinities of dipnoi.
- (b) General body organization in chelonia.
- (c) Latitudinal migration in birds.
- (d) Oligocene primates.