## UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program / Second Semester – Spring 2023

Paper: Zoology-II (Chordate Diversity) Course Code: ZOOL-103

## THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

## Q.1. Answer the following short questions:

(6x5=30)

- i. How temperature regulated in fishes and they perform gas exchange?
- ii. Write a short note on blood circulation in amphibians.
- iii. Write a short note on nervous system of fishes and sensory functions.
- iv. Write a short note on osmoregulation and excretion in amphibians.
- v. Write a short note on osmoregulation and excretion in fishes.
- vi. How mammals were adopted with the external structure developments and locomotion?

Answer the following questions:

(3x10=30)

- Q.2 Describe phylogenetic relationships of Pisces with other vertebrates' evolution.
- Q.3 What is the structure, anatomy and organ systems of Acorn worms, Urochodates and Cephalochodates?
- **Q.4** Write a note on the reproduction; life histories and metamorphosis of protochordates.