

# **BINDURA UNIVERSITY OF SCIENCE EDUCATION**

## **DEPARTMENT OF BIOLOGICAL SCIENCES**

**BSc HONOURS IN BIOLOGICAL SCIENCES/BSc HONOURS IN EDUCATION (BIOLOGY)  
DIVERSITY OF LIFE 2 (BZH 102)**

**EXAMINATION  
2 HOURS**

**AUG 2023**

### **INSTRUCTIONS**

Answer FOUR questions. You MUST answer QUESTION 1 (Section A) and any THREE questions from Section B. Each question carries 25 MARKS. Where a question contains subdivisions, the mark value of each subdivision is given in brackets. Illustrate your answers where appropriate with large, clearly labelled diagrams. You should not spend more than thirty minutes on each question.

### **SECTION A (COMPULSORY)**

1. a. Draw a fully labelled drawing showing the body structure of a Platyhelminthes. (15marks)
- b. Describe adaptations to parasitism of Platyhelminthes (10marks)

### **SECTION B**

2. a. Describe the general characteristics of annelids. (15 marks)
- b. Outline the classification of annelids into classes. (10 marks)
3. a. Describe the characteristics of arthropods. (15 marks)
- b. Explain the success of class Insecta. (10 Marks).
4. a. Describe the three types of canal systems in Porifera. (15 Marks)
- b. Outline the classification of sponges into classes. (10 Marks)
5. Describe the characteristics of the Superclass Tetrapoda and explain how they have assisted their occupation different habitats
6. Write brief notes on any FIVE of the following,
  - (a) Bilateral symmetry (5 marks)
  - (b) Functions of the coelom (5 marks)
  - (c) Body cavities (5 marks)
  - (d) Protostomes (5 marks)
  - (e) Deuterostomes (5 marks)
  - (f) Radial symmetry (5 marks)

**END OF EXAMINATION QUESTION PAPER**