

BINDURA UNIVERSITY OF SCIENCE EDUCATION
DEPARTMENT OF BIOLOGICAL SCIENCES
BScBZH/HBScED/BScED
VERTEBRATE BIOLOGY(BZH 202)

EXAMINATION
2 HOURS (100 MARKS)

 **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)

Section A

1. (a) Describe how an animal's diet can be determined by examining the structure of its skull and teeth. (17 marks)
- (b) Describe the functions of the four chordate features. (8 marks)

SECTION B

2. Compare the circulatory systems among fish, amphibians and mammals.
3. Describe the adaptations of birds for flight.
4. (a) Outline the characteristics that distinguish the class Chondrichthyes from Osteichthyes. (16 marks)
- (b) Using named examples, describe the three subphyla of chordates. (9 marks)
5. Discuss the reasons for the success of the class Mammalia.

6. Write short notes on any **FIVE** of the following:

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|--------------------------|-----------|
| (a) Carinate birds | (5 marks) |
| (b) Anadromous | (5 marks) |
| (c) Types of caudal fins | (5 marks) |
| (d) Determinate cleavage | (5 marks) |
| (e) Oviparous | (5 marks) |
| (f) Swim bladder | (5 marks) |

END OF EXAMINATION QUESTION PAPER