

BINDURA UNIVERSITY OF SCIENCE EDUCATION

DEPARTMENT OF BIOLOGICAL SCIENCES

BSc HONOURS IN BIOLOGICAL SCIENCES

POPULATION AND COMMUNITY ECOLOGY (BZH 219)

EXAMINATION

2 HOURS

MAR 2024

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. Describe a method of estimating a population of a named animal species.

SECTION B

2. Discuss the models of population growth.
3. (a) Explain, giving examples, the meaning of the term LIFE TABLE.
(10 marks)
(b). Distinguish between type 1, type 2 and type 3 survivorship curves giving examples in each case.
(15 marks)
4. (a) Distinguish between intraspecific and interspecific competition.
(5 marks)
(b) Explain, with examples, how interspecific competition influences species coexistence and community diversity.
(20 marks)
5. Discuss the theories of ecological succession.
6. Discuss the human impacts on species populations and communities.

END OF EXAMINATION QUESTION PAPER