

COURSE CODE: B204 (S) 2005

Page 1 of 2

UNIVERSITY OF SWAZILANDSUPPLEMENTARY EXAMINATION PAPER 2005

TITLE OF PAPER **INVERTEBRATE ZOOLOGY**

COURSE CODE: **B204**

TIME ALLOWED: **THREE HOURS**

INSTRUCTIONS: 1. **ANSWER ANY FOUR QUESTIONS**
 2. **EACH QUESTION CARRIES TWENTY FIVE (25) MARKS**
 3. **ILLUSTRATE YOUR ANSWERS WITH LARGE AND
 CLEARLY LABELLED DIAGRAMS WHERE APPROPRIATE**

SPECIAL REQUIREMENTS:

NONE

**THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS
BEEN GRANTED BY THE INVIGILATORS**

Question 1

- i. Briefly describe the various types of excretory organs observed in invertebrates. (15)
- ii. Describe sexual reproduction as observed in ciliates. (10)

Question 2

- i. Distinguish between the trochophore and veliger larvae, stating their evolutionary significance. (10)
- ii. Briefly discuss adaptive radiation with respect to feeding in polychaetes. (15)

[Total = 25 marks]

Question 3

- a. With the aid of diagrams, describe the pelagic zone of the marine habitat and organisms living within it. (15)
- b. Briefly discuss possible means by which animals distribute food to all cells. (10)

[Total marks = 25]

Question 4

Using named examples, define and explain the significance of the following to organisms:

- i. Cephalisation
- ii. Convergent evolution
- iii. Courtship behaviour
- iv. Polymorphism
- v. Paedomorphosis

[Total = 25 marks]

Question 5

Discuss how metazoan parasites are adapted to their lifestyle.

[Total = 25 marks]

Question 6

Discuss in detail the importance of invertebrates to mankind.

[Total = 25 marks]