

**UNIVERSITY OF SWAZILAND**

**SUPPLEMENTARY EXAMINATION PAPER 2006**

**TITLE OF PAPER** : INVERTEBRATE ZOOLOGY

**COURSE CODE** : B204

**TIME ALLOWED** : THREE HOURS

**INSTRUCTIONS** :

1. THIS PAPER HAS SIX (6) QUESTIONS
4. ANSWER ANY FOUR (4) QUESTIONS
5. WHEREVER POSSIBLE ILLUSTRATE YOUR ANSWERS WITH LARGE CLEARLY LABELLED DIAGRAMS

**SPECIAL REQUIREMENTS:** NONE

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

**Question 1**

Compare and contrast poriferan and cnidarian body walls.

[Total = 25 marks]

**Question 2**

Using named examples, differentiate between pseudophyllidean and cyclophyllidean development in the Class Cestoda.

[Total = 25 marks]

**Question 3**

a. With the aid of diagrams, describe the various types of respiratory surfaces observed in invertebrates. (15)

b. Describe the pelagic zone and organisms occurring in it. (10)

[Total marks = 25]

**Question 4**

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

- i. Asexual reproduction
- ii. Sexual reproduction
- iii. Symbiosis
- iv. Internal fertilisation
- v. Cryptobiosis

[Total = 25 marks]

**Question 5**

i. Briefly explain, with examples, why terrestrial animals have more complex reproductive behaviour than aquatic ones. (10)

ii. Using examples, explain how sponges have ensured simultaneous increase in surface area with increase in volume of the atrium. (15)

[Total = 25 marks]

**Question 6**

Write short notes on any *two* of the following:

- i. Urochordata
- ii. Tardigrada
- iii. Lophophorate phyla

[Total = 25 marks]