

**UNIVERSITY OF SWAZILAND**

**SUPPLEMENTARY EXAMINATION PAPER 2008**

**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**

- a. Outline the mode of operation of the water vascular system in the Asteroidea and enumerate its functions. (15)
- b. Outline stages in the ontogeny of a metazoan organism. (10)
- [Total = 25 marks]

**QUESTION 2**

“Invertebrate research is of critical value in the agricultural and medical fields”. Using named examples, discuss this statement.

[Total = 25 marks]

**QUESTION 3**

Write an essay on the protozoans as agents of economically significant diseases in Swaziland.

[Total marks = 25]

**QUESTION 4**

Discuss the structure and function of the water vascular system and variation thereof within the echinoderms.

[Total = 25 marks]

**QUESTION 5**

- i. Explain how the symmetry observed in the echinoderms and cnidarians demonstrates convergent evolution. (10)
- ii. Discuss in detail products of evolution (15)
- [Total = 25 marks]

**QUESTION 6**

Discuss variation in habitats as observed in marine and freshwater systems as well as the lifestyle of organisms in these habitats.

[Total = 25 marks]