

BINDURA UNIVERSITY OF SCIENCE EDUCATION
BIOLOGICAL SCIENCES DEPARTMENT
BScBZH
DIVERSITY OF LIFE II (BZH102)

EXAMINATION
2 HOURS (100 MARKS)

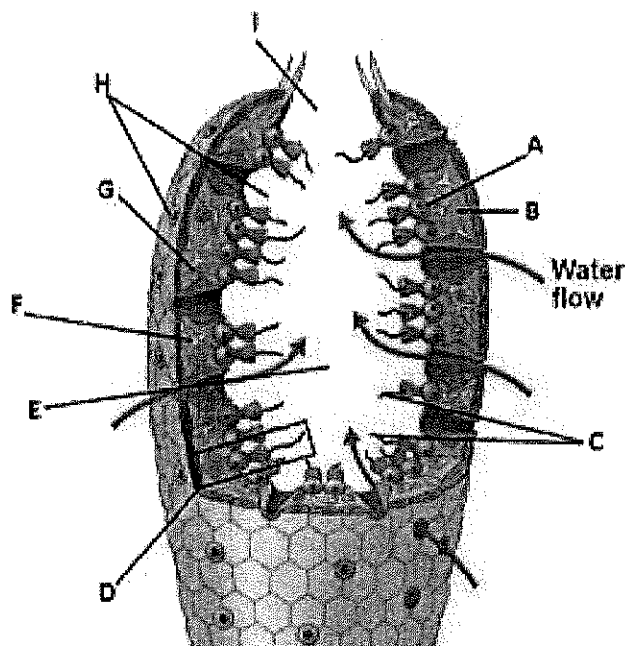
AUG 2017 4

INSTRUCTIONS TO CANDIDATES

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 sub-divisions, the mark value of each sub-division is given in brackets. Illustrate your answer where appropriate with large clearly labelled diagrams. You should not spend more than thirty minutes on each question.

Section A (Compulsory)

1. (a) Figure 1 shows *Leucosolenia* spp.



- (i) State the grade of organisation displayed by *Leucosolenia* spp. (1 mark)
(ii) Name the parts labelled A to I. (9 marks)
(b) Outline the life cycle of *Obelia* spp. (15 marks)

Section B

2. (a) Describe the triploblastic body plan of animals. (15 marks)
(b) With the aid of annotated diagrams, describe the anatomy of a generalized Annelid. (10 marks)

3. Describe the general features of Platyhelminthes and show how these have been modified in parasitic.

4. Write brief notes on any FIVE of the following:

- (a) Bilateral symmetry. (5 marks)
- (b) Pseudocoelomate animals. (5 marks)
- (c) Locomotion in annelids. (5 marks)
- (d) General characteristics of Molluscs. (5 marks)
- (e) General characteristics of vertebrate animals. (5 marks)
- (f) Reproduction in nematodes. (5 marks)

5. Describe embryonic development in the Protostomia and Deuterostomia.

6. (a) Justify the inclusion of the Annelida, Mollusca and Arthropoda in the protostome lineage. (10 marks)
- (b) Describe the feeding habits in phylum Arthropoda. (15 marks)

END OF EXAMINATION QUESTION PAPER