



**PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF HEALTH, APPLIED SCIENCES AND NATURAL RESOURCES

DEPARTMENT OF NATURAL AND APPLIED SCIENCES

QUALIFICATION: BACHELOR OF SCIENCE	
QUALIFICATION CODE: 07BOSC	LEVEL: 6
COURSE CODE: EBD601S	COURSE NAME: EVOLUTION AND BIOLOGICAL DIVERSITY
SESSION: JULY 2022	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

SUPPLEMENTARY / SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
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<p style="text-align: center;">INSTRUCTIONS</p> <ol style="list-style-type: none">1. Write clearly and neatly2. Number the answers clearly3. All written work MUST be done in blue or black ink4. No books, notes and other additional aids are allowed5. Mark all answers clearly with their respective question numbers6. Draw diagrams wherever necessary

PERMISSIBLE MATERIALS

None

THIS QUESTION PAPER CONSISTS OF 4 PAGES
(Including this front page)

QUESTION 1:

Multiple choices

[4]

- 1.1 The members of phylum Rotifera are cosmopolitan, which means they are found in many different habitats, and the body is made of three parts. These three parts are the; (1)
- a) head, body, and foot
 - b) head, abdomen, and tail
 - c) head, neck, and body
 - d) head, trunk, and tail
- 1.2 The coelacanth is an example of a; (1)
- a) primitive, fishlike amphibian
 - b) jawless fish
 - c) lobe-finned fish
 - d) ray-finned fish
- 1.3 In a bird, the breakdown of food begins in the; (1)
- a) proventriculus.
 - b) esophagus.
 - c) small intestine.
 - d) cloaca.
- 1.4 The only egg-laying mammals are found in the order; (1)
- a) Monotremata
 - b) Marsupialia
 - c) Placental
 - d) Rodentia

QUESTION 2:

Fill in the blanks

[5]

- 2.1 Flatworms are in the phylum _____ and are flattened _____ with _____ symmetry. (2)
- 2.2 Brittle stars are in the class _____ and have slender _____ that easily break off to escape predators. (2)
- 2.3 The oldest known bird is _____ . (1)

QUESTION 3:

Distinguish between the pairs of the following terms [6]

- 3.1 Lancelet; Tunicate (2)
- 3.2 Mastax; Corona (2)
- 3.3 Telson; swimmeret (2)

QUESTION 4:

One sentences answers [10]

- 4.1 Which order containing salamanders? (1)
- 4.2 Name the first animals (phylum) that have true body cavity. (1)
- 4.3 Which of the mollusk classes are filter feeders? (1)
- 4.4 Book lung is a characteristic of which Phylum? (1)
- 4.5 Which specialized cell that carries the food to all other parts of the sponge. (1)
- 4.6 Name the invertebrate phylum that belong to deuterostome. (1)
- 4.7 Aristotle's Lantern is a characteristic feature of which echinoderm? (1)
- 4.8 Which animal phylum is commonly called as sea anemone? (1)
- 4.9 How many ciliary plates do Ctenophores usually have? (1)
- 4.10 Name the largest part of a mammalian brain. (1)

QUESTION 5:

Short questions [11]

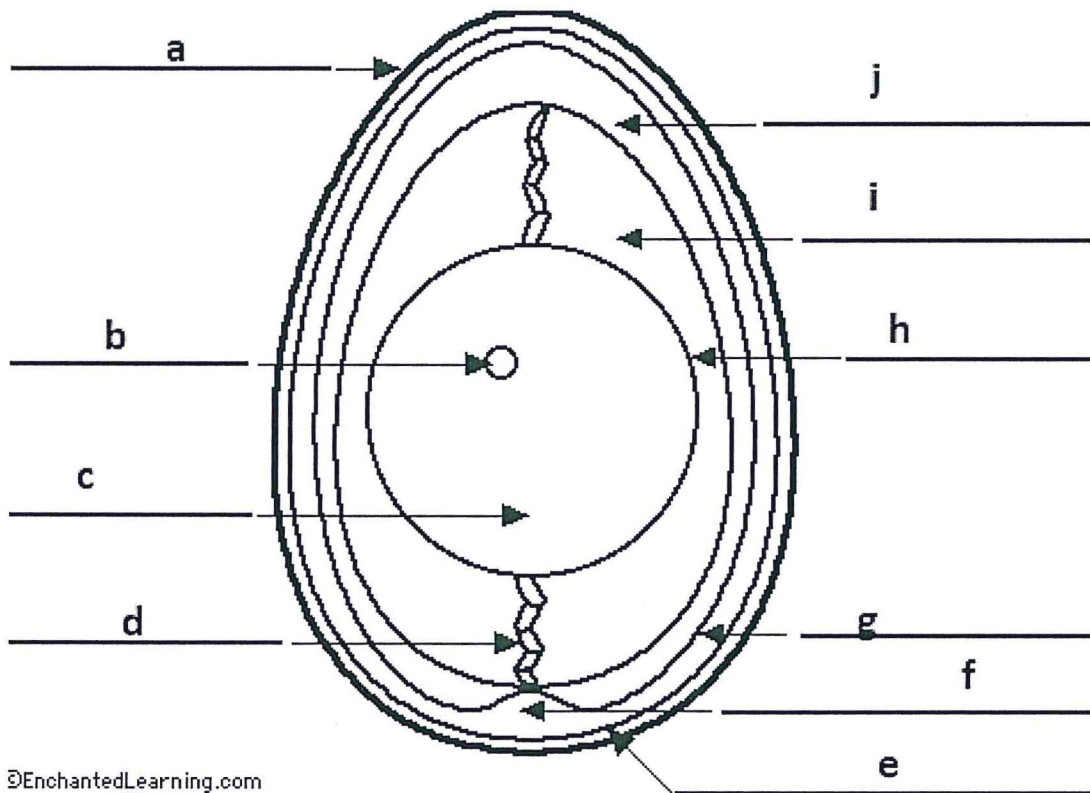
- 5.1 Which phylum and subphylum are sea squirts found? (2)
- 5.2 What are glue cells found in Ctenophores and their function? (2)
- 5.3 How does a frog capture insect? (1)
- 5.4 List the three classes of sponges and distinguish characteristics among them based on skeleton structure. (3)
- 5.3 What are the three order of amphibians and give example of each? (3)

QUESTION 6:

Longer questions

[34]

- 6.1 Distinguish between different classes of annelids with example. (6)
- 6.2 Name the four specialised teeth of mammals and its function. (6)
- 6.3 Compare and contrast between Platyhelminthes and Nematode. Your results should be presented in tabular form. (10)
- 6.4 In a tabular form distinguish the two super classes Pisces. (7)
- 6.5 Identify the structures labelled from a-j in the diagram of an amniote egg of the bird shown below. (5)



QUESTION 7:

Essay questions

[30]

- 7.1 Explain the general characteristics of Phylum Mollusca. (15)
- 7.2 Describe the structure of shark with the aid of an annotated diagram (15)

THE END