



PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF HEALTH AND APPLIED SCIENCES

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: JUNE 2019	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	DR JEYA KENNEDY
MODERATOR:	MR MUNYARADZI ZIVUKU

INSTRUCTIONS
<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 numbers

PERMISSIBLE MATERIALS

None

THIS QUESTION PAPER CONSISTS OF 5 PAGES

(Including this front page)

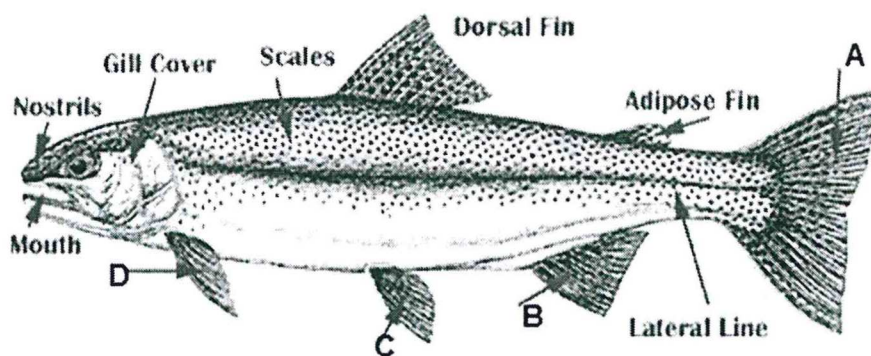
QUESTION 1:

Multiple choices

[5]

- 1.1 Which of the following is NOT true about the cecum? (1)
a) It branches from the small intestine
b) It acts as a fermentation chamber
c) It is found in mammals that chew cud
d) It contains microorganisms that complete digestion
- 1.2 One bird that bears precocial young is the; (1)
a) Hawk
b) Parrot
c) Pigeon
d) Duck
- 1.3 Which of the following pairs is most closely related? (1)
a) Snake & lizard
b) Crocodile & tuatara
c) Alligator & komodo dragon
d) Alligator & alligator snapping turtle
- 1.4 The direction that air flows when a frog breathes is controlled by the; (1)
a) Tympanic membrane
b) Floor of the mouth
c) Nostrils
d) Lungs
- 1.5 Identify the structure of fins labelled 'A' in the diagram of the fish shown below. (1)
a) Dorsal fin(s)
b) Caudal fin
c) Pectoral fins
d) Pelvic fins

Anatomy of a Fish

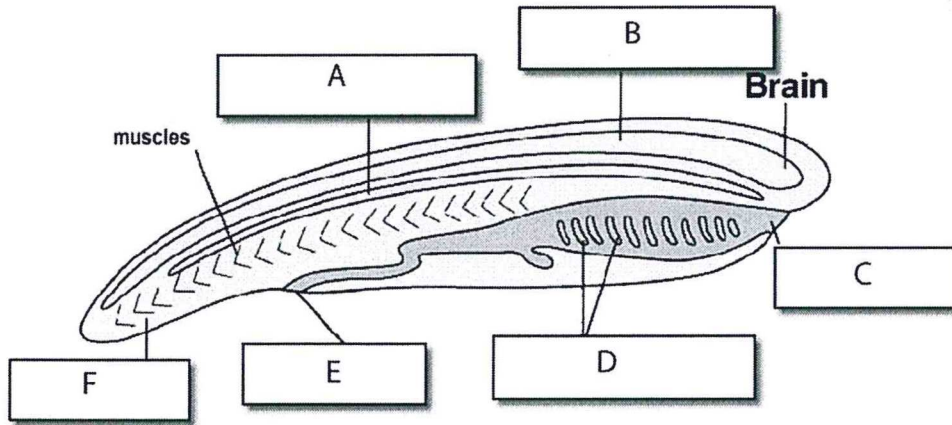


QUESTION 5:

[8]

Structures and functions

- 5.1 Draw a well labelled structure of the digestive system of an earthworm. (5)
- 5.2 Identify the structures labeled from A–F in the diagram of a chordates egg shown below. (3)



QUESTION 6:

Short answer questions

[10]

- 6.1 Describe the characteristics of the phylogeny of ecdysozoa and mention the two phylum which it includes? (2)
- 6.2 What is the dominant body form in the life cycle of a scyphozoan and an anthozoan? (2)
- 6.3 How do sea stars differ from crinoids? (2)
- 6.4 Mention four parasite nematodes. (4)

QUESTION 7:

Long answer questions

[27]

- 7.1 Give an account of the life cycle of sheep liver fluke. (5)
- 7.2 Differentiate amongst agnathan, chondrichthyes and osteichthyes in tabular form. (7)
- 7.3 Discuss the unique reproductive pattern of 3 mammal groups. (6)
- 7.4 Describe the body structure of Porifera. (9)

QUESTION 8:

Essay questions

[30]

- 8.1 Explain the general characteristic of Squamata in reptile with example. (15)
- 8.2 Distinguish among arthropod subphyla and give examples of animals that belong to each group. (15)

THE END