

UNIVERSITY OF RUHUNA
BACHELOR OF SCIENCE GENERAL DEGREE LEVEL I (SEMESTER I)
EXAMINATION – JULY 2016

Subject : Zoology

Course Unit : ZOO 1112 – Invertebrate Diversity I

Time: 01½ hours

Index No :

Question No.	Marks
Part A	1
	2
	3
	4
Part B	1
	2
	3
Assessment	
Total	

Answer the **Part A** and **any two** questions from **Part B**.

Illegible handwriting would be penalized.

Part A

1. (i). What is a phylogenetic tree?

.....

.....

.....

(ii). Mention the major events that occurred in Carboniferous period?

.....

.....

.....

.....

(iii). Briefly describe different feeding types of protozoans?

.....

.....

.....

(iv). State **two** functions of body cover/body envelop of protozoans?

.....
.....
.....
.....

(v). Why the polynomial nomenclature was discarded? Give **two** reasons.

.....
.....
.....
.....
.....
.....

2. (i). Mention classes of phylum Porifera.

.....
.....
.....

(ii). Give **one** characteristic feature for each class.

Class	Characteristic feature

(iii). Name the structure depicted in **Figure 1**.

.....

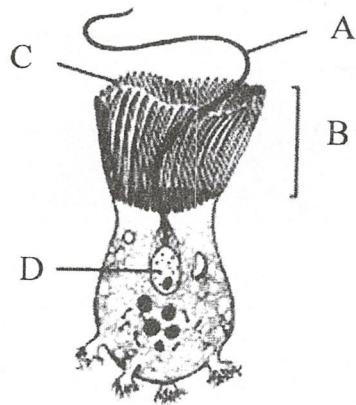


Figure 1

(iv). Name the letters denoted by **A, B, C** and **D**.

A. B.

C. D.

(v). State **two** functions of above structure.

.....

(vi). Name **three** Polypoid zooids and Medusoid zooids found in Cnidarians.

Polypoid zooids	Medusoid zooids

3. (i). Mention **two** morphological features of animals of Class Turbellaria important for their mode of life.

.....
.....

(ii). Give **two** differences found in morphology of male and female nematodes.

.....
.....
.....

(iii). Mention **three** adaptations in the **life cycles** of Trematodes important for their mode of life. Briefly mention the importance of these adaptations.

.....
.....
.....
.....
.....
.....

(iv). List **two** important morphological features found in parasitic nematodes for their mode of life.

.....
.....
.....

(v). State **two** functions of pseudocoelom in Nematodes.

.....
.....
.....

4. (i). Fill in the table using **Present (✓)** or **Absent (X)**.

	Annelida	Nematoda	Platyhelminthes
Cuticle			
Circulatory system			
Hermaphroditism			
Larval stages			
Endoparasitic species			
Respiratory system			
Complete digestive system			
Closed circulatory system			

(ii). State the **feeding types** of Polychaeta?

.....

.....

.....

.....

.....

.....

.....

(iii). Mention **two** adaptations of errant polychaetes for their mode of life.

.....

.....

.....

.....

(40 minutes)

(40 marks)

Part B

1. Write an account on locomotory organelles of protozoans.

(25 minutes)

(20 marks)

2. Describe the features that make Class - Hirudinea different from other classes of Annelida.

(25 minutes)

(20 marks)

3. **Answer both parts.**

(i). Describe the life cycle of class Scyphozoa.

(ii). Briefly mention how Cestodes are adapted for their mode of life.

(25 minutes)

(20 marks)



For the assessment

(20 marks)

@@@@@@@@@@@@@@@@@@

UNIVERSITY OF RUHUNA
BACHELOR OF SCIENCE GENERAL DEGREE LEVEL II (SEMESTER I)
EXAMINATION – JULY 2016


Subject : Zoology

Time: 01½ hours

Course Unit : ZOO 2102 – Mammalian Organization and Diversity

Answer **any three** questions only.
Illegible handwriting would be penalized.

1. (i). Name integumentary derivatives found in mammals.
(ii). Briefly explain the main functions of different integumentary derivatives and their contribution to the success of mammals.
2. (i). What is pentadactyl limb structure?
(ii). Using suitable examples describe its modifications relevant to the locomotion in mammals.
3. Comment on **any two** of the following.
(i). Prey catching adaptations in fissiped carnivores.
(ii). Aquatic adaptations in monotremata.
(iii). Feeding adaptations found in artiodactyls.
4. (i). Write an account on **any three** zoogeographical regions and the major faunal realms found in each region.
(ii). Briefly discuss the Wegener's theory of continental drift.

 Marks for continuous assessments

(20 marks)

@@@@@@@@@@@@@@@@

