

# MAASAI MARA UNIVERSITY REGULAR UNIVERSITY EXAMINATIONS 2018/2019 ACADEMIC YEAR FIRST YEAR SECOND SEMESTER SCHOOL OF TOURISM OF TOURISM & NATURAL RESOURCE MANAGEMENT DIPLOMA IN TOURISM AND WILDLIFE MANAGEMENT COURSE CODE: NDTW 121 COURSE TITLE: NATURAL HISTORY OF INVERTEBRATES

DATE: 15.4.2019 TIME: 8.30AM - 10.30AM

### **INSTRUCTION TO CANDIDATES**

This paper has two sections A & B.

Answer question **ONE** in section A and any **TWO** questions in section B.

### **SECTION A: ANSWER ALL QUESTIONS (30MKS)**

### **QUESTION 1**

- (i) Briefly explain the following terms: (2mks)
  - (a) Sexual dimorphism.
  - (b) Polymorphic
- (ii) State the function of the following structures found in invertebrates:

(3mks)

- (a) Ctenidia
- (b) Radula
- (c) Clitellum
- (iii) Describe the distinguishing features of members of phylum porifera.

(4mks)

- (iv) Explain the general characteristics of invertebrates (6mks)
- (v) In what ways are Annelids the most advanced worms? (5mks)
- (vi) While giving examples describe the distinguishing features of phylum Cnidaria (10mks)

# **SECTION B: ANSWER ANY TWO QUESTIONS (40MKS)**

# **QUESTION 2**

(i) Explain the distinguishing characteristics of phylum Mollusca

(10mks)

- (ii) Name and highlight the key features of the classes of phylum Mollusca (7mks)
- (iii) Nematodes and Arthropods are in super phylum Ecdysozoa. State one similarity and two differences between them (3mks)

# **QUESTION 3**

(i) Explain the general characteristics and economic importance of phylum Nemertea (6mks)

- (ii) Identify and briefly describe the characteristics of the classes of phylum Platyhelminthes (8mks)
- (iii) Describe the general characteristics of Rotifers (6mks)

## **QUESTION 4**

- (i) *Caenorhabditis elegans* is a nematode that has been used greatly in biological research. Give **five** reasons for this **(5mks)**
- (ii) While giving an example in each case name and describe four subphyla of the living forms in phylum arthropoda (12mks)
- (iii) What are the distinguishing features of phylum arthropoda (3mks)

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