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**GARISSA UNIVERSITY**

**UNIVERSITY EXAMINATION 2018/2019 ACADEMIC YEAR ONE**

**SECOND SEMESTER EXAMINATION**

**SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES**

**FOR THE DEGREE OF BACHELOR OF EDUCATION**

**COURSE CODE: ZOO 102E**

**COURSE TITLE: INVERTEBRATE ZOOLOGY**

**EXAMINATION DURATION: 2 HOURS**

**DATE: 04/02/2020 TIME: 2.00-4.00 PM**

**INSTRUCTION TO CANDIDATES**

* **The examination has FIVE (5) questions**
* **Question ONE (1) is COMPULSORY**
* **Choose any other TWO (2) questions from the remaining FOUR (4) questions**
* **Use sketch diagrams to illustrate your answer whenever necessary**
* **Do not carry mobile phones or any other written materials in examination room**
* **Do not write on this paper**

**This paper consists of TWO (2) printed pages *please turn over***

**QUESTION ONE (COMPULSORY)**

1. Using examples for each differentiate between triploblastic and diploblastic animals **[4 marks]**
2. State three similarities between protozoan and animals **[3 marks]**
3. Outline five differences between members of class insecta and class Arachnida **[5 marks]**
4. Write short notes on classes of phylum platyhelminthes **[6 marks]**
5. Briefly describe the residence of free-living nematodes **[2 marks]**
6. Differentiate between Protostome and Deuterostome **[2 marks]**
7. Briefly describe the morphological structure of a mollusc’s body **[6 marks]**
8. Show how crustaceans are different from other arthropods **[2 marks]**

**QUESTION TWO**

Discuss the main characteristic used in invertebrates classification into phyla **[20 marks]**

**QUESTION THREE**

1. Briefly describe general characteristics of Phylum Annelida **[5 marks]**
2. Using example discuss **acoelomate**, pseudocoelomate and coelomate **[15 marks]**

**QUESTION FOUR**

1. Both earthworm and tape worm are commonly referred to as worms .Briefly explain why they have been placed in different phyla**. [5 marks]**
2. Discuss classification of phylum Arthropoda **[15 marks]**

**QUESTION FIVE**

1. Sponges are considered to be the most primitive invertebrates. Explain **[5 marks]**
2. Briefly discuss body symmetry exhibited by body plans of invertebrates. **[15 marks]**