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**TECHNICAL UNIVERSITY OF MOMBASA**  
**FACULTY OF APPLIED AND HEALTH SCIENCES**  
**DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES**  
**UNIVERSITY EXAMINATION FOR:**  
**BACHELOR OF SCIENCE IN FISHERIES AND OCEANOGRAPHY**  
**BSFO 16S/YEAR 2/ SEMESTER 1**  
**AAB 4251: ANIMAL TAXONOMY**

**SPECIAL/ SUPPLIMENTARY EXAMINATIONS**  
**SERIES: SEPTEMBER 2018**  
**TIME: 2 HOURS**

*Instructions to Candidates*

This paper consists of FIVE questions

Answer question ONE (COMPULSORY) and any other TWO questions.

*This paper consists of two printed pages.*

*Mobile phones are NOT allowed in the examination room*

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**QUESTION ONE. (30 MARKS)**

- a) Describe the following terms
- i. Paralellism (2marks)
  - ii. Bipinnaria (2marks)
- b) Differentiate between epicuticle and procuticle (4marks)
- c) Which are the FOUR distinct sense organs in annelids? (4marks)
- d) Describe the nervous system of echinoderms (5 marks)
- e) Name FOUR features used in the classification of an animal (4marks)
- f) Outline FOUR classes of phylum Echinodermata (4marks)
- g) Briefly describe the nervous system of arthropods (5marks)

**QUESTION TWO. (20 MARKS)**

Arthropods are more widely distributed over the earth than any other animal phylum thus they live in virtually every habitat on earth.

- a. Which are the distinctive characteristics of arthropods? (10marks)
- b. Describe the process of molting in arthropods. (10marks)

**QUESTION THREE. (20 MARKS)**

There are 6 kingdoms that are currently identified. Discuss the features that make kingdom Animalia distinct from the other kingdoms. (20marks)

**QUESTION FOUR. (20 MARKS)**

Sense organs in crustaceans are well developed. Discuss. (20marks)

**QUESTION FIVE. (20 MARKS)**

Mollusks have the most versatile body plan of all animals. Discuss. (20marks)