**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**P.O. Box 972-60200 – Meru-Kenya.**

 **Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293, +254 789151411**

**Fax: 064-30321**

**Website:** [**www.must.ac.ke**](http://www.must.ac.ke) **Email:** **info@must.ac.ke**

**University Examinations 2016/2017**

FIRST YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOLOGICAL SCIENCES, BACHELOR OF SCIENCE IN EDUCATION SCIENCE

AND

SECOND YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL EXTENSION AND EDUCATION.

**SZA 3100: INVERTEBRATE ZOOLOGY**

**DATE: DECEMBER, 2016 TIME: 2 HOURS**

**INSTRUCTIONS: -** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

1. Explain the meaning of the following terms; (5 marks)
2. Symmetry
3. Coelomate
4. Describe briefly asexual reproduction in sponges (4 marks)
5. List the distinguishing characteristics of members of phylum arthropoda. (4 marks)
6. Describe the structure of a parapodium aided with a diagram (5 marks)
7. Explain how various poriferans cell types help them perform their functions (6 marks)
8. Differentiate between polychaetes and oligochaetes (6 marks)

**QUESTION TWO (20 MARKS)**

1. Describe the life cycle of a trematode (10 marks)
2. Explain why arthropods show great diversity and abudance in nature. (10 marks)

**QUESTION THREE (20 MARKS)**

On an academic trip to the coastal region of Kenya, the students came across star shaped and cucumber shaped marine animals with pentamerous symmetry. Describe the hallmark feature of the phylum in which they belong and list their characteristic features (20 marks)

**QUESTION FOUR (20 MARKS)**

Classify members of phylum mollusca describing features of each class. (20 marks)

**QUESTION FIVE (20 MARKS)**

1. Classify the structural features of a paramecium. (10 marks)
2. Elaborate on cestodes adaptations to parasitic mode of life. (10 marks)