

**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 2015/2016**

FIRST YEAR, FIRST SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE BIOLOGICAL , BACHELOR OF SCIENCE IN AGRICULTURAL EXTENSION AND EDUCATION AND BACHELOR OF EDUCATION SCIENCE

**SZA 3100: INVERTEBRATE ZOOLOGY**

**DATE: NOVEMBER, 2015 TIME:** $2 $**HOURS**

**INSTRUCTIONS:** *Answer question* ***one COMPULSORY*** *and any other* ***two*** *questions.*

**QUESTION ONE – (30 MARKS)**

1. Explain the meaning of the following terms; (5 Marks)
2. Coelom
3. Osculum
4. Differentiate between invertebrates & vertebrates. (4 Marks)
5. Describe the morphological features found in members of phylum mollusca. (4 Marks)
6. Explain how various cell types in poriferans help them perform their function(6 Marks)
7. Compare the evolutionary relationships between arthropods & annelids. (4 Marks)
8. List the distinguishing characteristics of the phylum protozoa. (4 Marks)
9. Describe the structure of a nematocyst. (3 Marks)

**QUESTION TWO (20 MARKS)**

1. Describe the Hallmark features of echinoderms. (6 Marks)
2. Describe the various classes of phylum echinodermata. (14 Marks)

**QUESTION THREE (20 MARKS)**

Elaborate on the adaptations of platyhelminths to their parasitic mode of life. (20 Marks)

**QUESTION FOUR (20 MARKS)**

1. Describe the body forms found in cnidarians . (6 Marks)
2. Explain how the various types of canal systems adapt the proferans to their environment

(14 Marks)

**QUESTION FIVE (20 MARKS)**

Analyse the various sub-phyla of phylum arthropoda giving examples. (20 Marks)