

**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

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**University Examinations 2015/2016**

SECOND YEAR, FIRST SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE ENTOMOLOGY & PARASITOLOGY

**SZH 3201 : COMPARATIVE ARTHROPOD MORPHOLOGY**

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

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

**QUESTION ONE – (30 MARKS)**

1. List the main sub-phylla of phylla arthropoda. (4 Marks)
2. Explain how arthropod adaptations have made them abundant in nature. (5 Marks)
3. Outline the distinguishing features of members of sub- phylum chelicerate. (4 Marks)
4. Describe briefly reproduction in order aranea. (4 Marks)
5. Differentiate between centipedes and millipedes. (5 Marks)
6. Draw a well labeled diagram of the antennal gland. (4 Marks)
7. Describe the various leg modifications in insects. (4 Marks)

**QUESTION TWO (20 MARKS**)

Describe the methods used in collection and preservation of insects. (20 Marks)

**QUESTION THREE (20 MARKS)**

1. Describe the morphological features of a general crustacean. (10 Marks)
2. Discuss various methods used in insect identification. (10 Marks)

**QUESTION FOUR (20 MARKS)**

1. Elaborate on wing adaptation & modification in insects. (10 Marks)
2. Explain how the alimentary canal is modified in insects. (10 Marks)