



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE &
TECHNOLOGY
SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCES
DEPARTMENT OF BIOLOGICAL SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN BIOLOGICAL SCIENCES
THIRD YEAR FIRST SEMESTER 2018/2019 ACADEMIC YEAR
MAIN CAMPUS - REGULAR**

COURSE CODE:	SBI 3313
COURSE TITLE:	ARTHROPOD BIOLOGY
EXAM VENUE:	STREAM: (BSC BIOLOGY)
DATE:	EXAM SESSION:
TIME: 2 HOURS	

Instructions:

- 1. Answer ALL questions in Section A and Any two questions in Section B**
- 2. Candidates are advised not to write on question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

SECTION A: SHORT ANSWER QUESTIONS (30 MARKS)

1. Describe how you would classify arthropods based on the number of appendages (3 marks)
2. Describe three modes of reproduction in arthropods and state an example of each (3 marks)
3. Using specific examples, list three structures used for gaseous exchange in arthropods (3 marks)
4. Describe the two types of compound eyes found in arthropods, and give an example of a species with such type of eyes (3 marks)
5. Outline three major features used to distinguish arthropods from other animals (3 marks)
6. State three distinguishing features of sub-phylum trilobitomorpha and give an example of an animal that belonged in this group (3 marks)
7. Name three classes of arthropods belonging to superclass merostomata and give an example of each (3 marks)
8. List three structural differences between insects and crustaceans (3 marks)
9. Differentiated between biramous and uniramous limbs, and state the evolutionary relationship between the two (3 marks)
10. Describe three ways in which dispersal enhances survival of terrestrial arthropods (3 marks)

SECTION B: ESSAY QUESTIONS (40 MARKS)

11. Using specific examples, describe the anatomy and economic importance of arthropods belonging to class Arachnida (20 marks)
12. Arthropods display a wide range of defensive mechanisms used to enhance their survival to reproductive maturity for continuity of the species. Discuss (20 marks)
13. Discuss various methods used to control and manage arthropod pests and vectors of diseases (20 marks)
14. Describe the anatomy and behavior of arthropods belonging to class Malacostraca (20 marks)