



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

**SECOND YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE AND BACHELOR OF
EDUCATION SCIENCE WITH INFORMATION TECHNOLOGY**

MAIN CAMPUS

SZL 205: ARTHROPOD BIOLOGY

Date: 13th December, 2016

Time: 8.30 - 11.30 am

INSTRUCTIONS:

- Answer ALL questions in SECTION A (4 marks each) and any TWO in SECTION B (15 marks each).



SZL 205 ARTHROPOD BIOLOGY

INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTION A. ANSWER ANY TWO QUESTIONS IN SECTION B.

TIME: 2 Hours

SECTION A (40 MARKS)

ANSWER ALL QUESTIONS IN THIS SECTION (4 MARKS EACH)

1. Differentiate between Progoneata and Opisthgoneata with examples.
2. Briefly describe the host seeking behaviour of mosquitoes.
3. Describe intralecithal cleavage in arthropods.
4. Define tagmatisation with examples.
5. Briefly describe the ecological diversity of mandibulate arthropods.
6. Outline FOUR definitive features of Sub-phylum Onychophora.
7. Describe the external anatomy of Sub-phylum Pycnogonida.
8. Differentiate between butterflies and moths.
9. Briefly explain the role of pheromones in the social organization of a honey bee colony.
10. Illustrate the alternative root hypothesis of the arthropod tree of life.

SECTION B (30 MARKS)

ANSWER ANY TWO QUESTIONS IN THIS SECTION (15 MARKS EACH)

11. Define eusocial insects and discuss the social organisation in a termite colony.
12. Describe the life-cycle, behaviour, physiology of feeding and medical importance of ticks.
13. Describe the definitive external and internal anatomy of Sub-phylum Arachnida.
14. Describe biological control with examples and discuss the advantages and disadvantages of this method.