

# MASENO UNIVERSITY UNIVERSITY EXAMINATIONS 2016/2017

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

## MAIN CAMPUS

**SZL 309: INSECT SCIENCE** 

Date: 13th December, 2016

Time: 12.00 - 3.00 pm

#### INSTRUCTIONS:

· Answer ALL questions in SECTION A and any TWO in SECTION B.

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#### SZL 309 INSECT SCIENCE

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 (5 MARKS EACH)

- State <u>FIVE</u> main characteristics of Order Coleoptera.
- Illustrate the structure of insect head.
- Briefly discuss the medical and therapeutic value of insects.
- List any <u>FIVE</u> reasons for the success of class insecta.
- Briefly describe the circulatory system of insects.
- 6. Differentiate between pheromones and allelochemicals.
- Briefly describe the structure and role of stomodaeal nervous system.
- 8. List any FIVE mechanisms insects use for their survival.

#### SECTION B (30 MARKS)

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

- Describe the general structure of an insect thorax and leg as well as the various modifications in the structure and function of insect leg.
- 10. Describe the structural and functional unit of insect compound eye and highlight the difference between the compound eyes of nocturnal and diurnal insects.
- Differentiate between innate, learned and complex behaviour and describe the types of innate behaviour found in insects.

12. Discuss the role of insects as herbivores, carnivores and decomposers.