



**MASENO UNIVERSITY**  
**UNIVERSITY EXAMINATIONS 2016/2017**

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

**MAIN CAMPUS**

**SZL 311: NATURE SURVEY I**

Date: 3<sup>rd</sup> December, 2016

Time: 8.30 - 11.30 am

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**INSTRUCTIONS:**

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



**SECTION A (40 MARKS) - ANSWER ALL QUESTIONS, 4 MARKS EACH.**

- Q1. Briefly describe the key characteristics of the Taiga Biome.
- Q2. Distinguish between the freshwater and marine ecosystems.
- Q3. State any four main sources of pollution to the Worlds' Oceans.
- Q4. Briefly distinguish between the terms: keystone species and indicator species, giving an example for each term.
- Q5. State the short- and long-term impacts of unplanned mangrove harvesting.
- Q6. Using examples, briefly describe the special adaptation of the animals found in the Chaparral Biome.
- Q7. State any factor that may lead to an observation of abundance or otherwise of any two (2) terrestrial and any two (2) aquatic organisms.
- Q8. Define the term: ecotype, giving three examples.
- Q9. Using any specific example, briefly discuss the possible impacts of human activities on an arid or semi-arid aquatic environment.
- Q10. State any eight (8) adaptations for terrestrial organisms.

**SECTION B (30 MARKS) – ANSWER ANY TWO (2) QUESTIONS, 15 MARKS EACH .**

- Q11. Discuss the “Layers of the Tropical Rain Forest.”
- Q12. Discuss the key physico chemical characteristics that chiefly affect a named aquatic organism.
- Q13. Evaluate the factors that lead to “overfishing” and its impacts.
- Q14. For a named terrestrial and a named aquatic organism, compare and contrast sampling and preservation procedures.