

**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

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**University Examinations 2016/2017**

SECOND YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN BIOCHEMISTRY, BACHELOR OF SCIENCE IN ENTOMOLOGY AND PARASITOLOGY.

**SBT 3200: ENVIRONMENTAL SCIENCE**

**DATE: DECEMBER, 2016 TIME: 2 HOURS**

**INSTRUCTIONS: -** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

1. Explain the benefits of marine ecosystem. (5 marks)
2. Explain the effects of biodiversity loss in Kenya due to environmental degradation. (5 marks)
3. Describe the ecological pyramid of energy using illustrations. (5 marks)
4. Explain the importance of conservation of souls as natural resource. (5 marks)
5. Outline various Global Warming adaptation measures. (10 marks)

**QUESTION TWO (20 MARKS)**

1. Discuss the hydrological cycle by use of diagrams and indicating the state of matter during the conversion processes. (10 marks)
2. Explain using appropriate illustrations, the process of ozone layer depletion and measures taken to control of its further damage. (10 marks)

**QUESTION THREE (20 MARKS)**

1. Discuss strategies by which agricultural production can be increased to match the population growth in developing countries. (10 marks)
2. Describe the various acceptable waste disposal methods, highlighting their merits and demerits. (10 marks)

**QUESTION FOUR (20 MARKS)**

1. Discuss the causes, control and effect of air pollution in Kenya. (15 marks)
2. State five functions of National Environmental Management Authority (NEMA). (5 marks)