



# **MAASAI MARA UNIVERSITY**

**REGULAR UNIVERSITY EXAMINATIONS  
2018/2019 ACADEMIC YEAR  
FOURTH YEAR, FIRST SEMESTER**

**SCHOOL OF TOURISM AND NATURAL  
RESOURCE MANAGEMENT  
BACHELOR OF ENVIRONMENTAL BIOLOGY  
AND HEALTH**

**COURSE CODE: EBH 400**

**COURSE TITLE: WASTEWATER MANAGEMENT**

**DATE: 4<sup>TH</sup> DECEMBER 2018**

**TIME: 1100 - 1300 HRS**

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## **INSTRUCTIONS TO CANDIDATES**

Answer **ALL** questions in section **A** and any other three in section **B**

*This paper consists of 2 printed pages. Please turn over*

## **SECTION A**

### **Answer all the questions in this section (25 marks)**

1. Define the following terms;
  - i) Water reclamation (1 mark)
  - ii) Grey water (1 mark)
  - iii) Sewerage (1 mark)
  - iv) Biochemical oxygen demand (1 mark)
2. Describe how domestic waste water can be distinguished from each other (5 marks)
3. a) Describe different types of effluent disposal systems (5 marks)  
b) With examples, describe how physical or chemical pollutants is a constituent of waste water (5 marks)
4. Describe several activities resulting to industrial waste water (5 marks)

## **SECTION B**

### **Answer any 3 (THREE) questions (45 marks)**

5. Discuss the environmental and health effects associated with use of waste water especially in the agricultural sector and domestic activities (15 marks)
6. Discuss the physical, chemical and biological characteristics of domestic and industrial waste water (15 marks)
7. a) Discuss any four main types of toxic effects that can manifest in human beings (8 marks)  
b) Discuss how poisons and harmful chemicals are tested and measured (7 marks)
8. Discuss the exposure guidelines, types and their applications in various places in our country (15 marks)

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