****

MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS**

 **2016/2017 ACADEMIC YEAR**

**FOURTH YEAR FIRST SEMESTER**

**SCHOOL OF TOURISM AND NATURAL RESOURCE MANAGEMENT**

**BACHELOR IN ENVIRONMENTAL STUDIES**

**(ENVIRONMENTAL BIOLOGY AND HEALTH)**

**COURSE CODE: EBH 400**

**COURSE TITLE: WASTE WATER MANAGEMENT.**

**DATE: 30TH JANUARY 2017 TIME: 1100 – 1300HRS**

**INSTRUCTIONS TO CANDIDATES**

Answer **ALL** questions in section **A** and any other **TWO** in section **B.**

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

**SECTION A**

1. What is grey water? (1mark)

1. What advantages does ground water recharge give as a waste water reuse? (4marks)
2. What are the aims of treating waste water (3marks)
3. What problems does sediment deposition cause? (3marks)
4. Differentiate point from non-point source pollution (2marks)
5. Explain chlorine dilemma (2marks)
6. What are some of the reported health effects from organic compounds water pollution? (5marks)
7. Describe aerobic suspended growth process for waste water treatment     (5marks)
8. What are some of the uses for urban reclaimed water? (5marks)

**SECTION B**

1. a. Which challenges face ground water recharge for waste water reuse purposes? (5marks)
2. What are some of the uses for urban reclaimed water? (5marks)
3. What are the merits and demerits of using waste water for agricultural purposes? (10 marks)
4. a. Describe aerobic suspended growth process for waste water treatment        (5marks)
5. What is the composition of sewage? (5marks)
6. Physical characteristics of sewage (5marks)
7. Explain the self purification process of a stream (5marks)
8. Explain the factors that affect self purification of a stream. (10marks)

b. Discuss how waste water can be reduced (10marks)

1. What is a chemical unit processes (2marks)
2. What are the three main sources of waste water (3marks)
3. Describe using a diagram, the process of sewage/waste water treatment (primary & secondary) (15 marks)

**//END**