THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

P.O. Box 62157

00200 Nairobi - KENYA

MAIN EXAMINATION

Telephone: 891601-6

JANUARY – APRIL 2019 TRIMESTER

FACULTY OF ARTS AND SOCIAL SCIENCES

DEPARTMENT OF HUMANITIES

REGULAR PROGRAMME

GES 322: WATER QUALITY RESOURCE AND ANALYSIS

Date: APRIL 2019 Duration: 2 Hours
INSTRUCTIONS: Answer Question ONE and any other TWO Questions

Q1. a) Elaborate the meaning of the following terms in relation to water quality

(6marks)

- i) Turbidity
- ii) B.O.D
- iii) Odourless
- b) Identify **two** types of pollution in water

(4marks)

- c) Highlight the **three** treatment methods used in
 - i) Water treatment

(3 marks)

ii) Explain any one treatment method mentioned above

(12 marks)

d) Identify any two sources of pollutants in water

(2marks)

- e) Elaborate the **three** R's as used in waste management in water **(3 marks)**
- Q2. a) Explain the **THREE** waste water types that need to be managed to curb environmental pollution (6marks)
 - b) Explain the chemical properties of water and how it is held by strong covalent bonds (2 marks)

- c) Elaborate the three main methods of waste treatment (12 marks)
- Q3. Discuss the global hydrological cycle as a source of water to the ecosystems (20 marks)
- Q4. a) Illustrate the FOUR main sources of water supply (8marks)
 - b) Elaborate the THREE tests done on water to ascertain its quality usage (12 marks)
- Q5. Discuss the various human activities affecting water quality and leading to the main source of pollutants (20 marks)

END