

**MAASAI MARA UNVERSITY**

**REGULAR UNIVERSITY EXAMINATIONS**

**2016/2017 ACADEMIC YEAR**

**SECOND YEAR FIRST SEMESTER**

**SCHOOL OF TOURISM & NATURAL RESOURCES MANAGEMENT**

**BACHEOR OF ARTS IN GEOGRAPHY**

**COURSE CODE: GEO 211**

**COURSE TITLE: INTRODUCTION TO HYDROLOGY**

**DATE: 6TH JULY, 2017 TIME: 0830 – 1030HRS**

**INSTRUCTIONS TO CANDIDATES**

* Answer question **ONE** and any other **THREE** questions.
* Use illustrations where appropriate

This paper consists of 2 printed pages. Please turn over

**SECTION A (ANASWER ALL QUESTIONS)**

Q1

1. What is the meaning of the following terms?
2. Water table (**2 marks)**
3. Wetlands **(2 marks)**
4. Evapotranspirometers (**2 marks)**
5. Hydrograph (**2 marks)**
6. Explain the role of Water Resources Users Association? **(4 marks)**
7. Using suitable illustrations, describe one experiment that you would do in a hydrology laboratory to demonstrate the main features of Darcy’s law for ground water flow. **(13 marks)**

**[Total 25 marks]**

**SECTION B (ANSWER ONLY THREE QUESTIONS)**

Q2 Discuss the dictum “water is life”. **[15 marks]**

Q3 (a)What is a rating equation? **(3 marks)**

(b)Explain how development initiatives in a watershed region could cause serious changes in the rating equation of a gauging station. **(12 marks)**

Q4 Describe five measures that you would recommend for the control of floods in urban areas. **[15 marks]**

Q5 Discuss six rainwater storage measures that should be employed by small-scale farming households in the Kenyan highlands. **[15 marks]**

Q6 A group of students wishes to undertake a stream gauging operation using wading rods and current meters at three widely separated sites along a river channel. One site is near the source of the river, another is near the estuary and another site is in between the source and the estuary. Describe five strategies that they need to use in order to obtain reliable measurements. **[15 marks]**

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