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**University Examinations 2014/2015**

THIRD YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN PUBLIC HEALTH

**HPP 3316: WATER AND SANITATION**

**DATE: DECEMBER 2014 TIME: 2 HOURS**

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

**QUESTION ONE (30 MARKS)**

1. Name the two sources of water and give an example in each case (4 marks)
2. What is your opinion on the global and Kenyan situation of water and sanitation regarding access? (3 marks)
3. Explain the meaning of the following
4. Evapotranspiration (1 mark)
5. Precipitation (1 mark)
6. Infiltration (1 mark)
7. Surface run off (1 mark)
8. What does surface water hydrology refer to? (2 marks)
9. What data is required for estimating quantity of water required in a municipality?

(2 marks)

1. Differentiate between sampling of water for chemical and bacteriological analysis

(4 marks)

1. Explain how drinking water can be treated at home (3 marks)
2. What three gender concerns in water and sanitation may arise in your community? (3 marks)
3. Explain the process of water abstruction ( 5 marks)

**QUETION TWO (20 MARKS)**

Discuss the distribution of fresh water on the earth’s surface in relation to water and sanitation activities

**QUESTION THREE (20 MARKS)**

Discuss the reforms in the water sector, through the enactment of water Act 2002.

**QUESTION FOUR (20 MARKS)**

Explain in detail how ground water can be contaminated by human wastes.