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**University Examinations 2015/2016**

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

**HPP 3305: WATER AND SANITATION**

**DATE: NOVEMBER 2015 TIME: 2 HOURS**

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

**QUESTION ONE (30 MARKS)**

1. Define the following concepts as applied in water and sanitation:
2. Water borne diseases (2 Marks)
3. Portable water. (2 Marks)
4. Water quality management. (2 Marks)
5. Eutrophication. (2 Marks)
6. Natural and artificial recharge. (2 Marks)
7. Explain all the factors that should be considered when siting a community borehole. (5 Marks)
8. Explain why non-point water pollution sources are very difficult to manage. (5 Marks)
9. Explain why women are the most affected in any country due to inadequate water and sanitation services. (4 Marks)
10. Describe how you will improve water supply in a rural setting. (4 Marks)
11. Explain the role of a septic tank in water and sanitation. (2 Marks)

**QUESTION TWO (20 MARKS)**

Systematically describe all the stages and processes followed in a conventional water treatment plant to make risky water safe for domestic use. (20 Marks)

**QUESTION THREE (20 MARKS)**

As the Public Health Officer incharge of Mt. Kenya Region, you have been invited by a downstream community to advise them on how to protect their water source. Explain your key points that you would include in your health education talks. (20 marks)

**QUESTION FOUR (20 MARKS)**

Discuss any five common parameters that are mostly used to measure water quality in Kenya. (20 Marks)