



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2008/2009
SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF HEALTH (ENVIRONMENTAL HEALTH)

HEH 210: WATER SUPPLY AND QUALITY CONTROL

DATE: THURSDAY 2ND APRIL 2009 TIME: 8.00 A.M. – 10.00 A.M.

INSTRUCTIONS:

This paper contains Section A and B. Section A is Short Essay Questions while Section B is long Essay Questions. The paper takes 2 hours

SECTION A

- Answer all the Questions in this section. This section carries 20 marks

1. State the factors to be considered in siting a water intake for domestic water supply. (3 marks.)
2. Citing specific examples define the following concepts. (6 marks)
 - i) Internal renewable water resources.
 - ii) Vadose water
 - iii) Potentiometric surface
3. Highlight three factors that have lead to diminishing world freshwater resource. (3 marks)
4. List the six major water resource catchment areas in Kenya.(3 marks)

5. With the aid of a well labeled diagram, name the two zones where subsurface water occurs. (5 marks)

SECTION B

- Attempt question ONE and any other TWO Questions. Questions ONE carries Twenty (20) marks while the other Questions carries Fifteen 15 marks each.

1. Discuss sources of water contamination and associated public health hazards.
(20 marks)
2. With the aid of a well labeled diagram, describe the hydrologic cycle. (15 marks)
3. With the aid of a well labeled diagram, describe the hydrologic cycle. (15 marks)
3. Describe in detail the process of ground water recharge and ground water movement.
(15 marks)
4. Discuss Kenya's four policy objectives on Water Resources and Development of 1999.
(15 marks)
5. Discuss the rationale and principles of integrated water resources management.
(15 marks)
6. Identify and describe a water abstraction technology of your choice in the context of community water supply.
(15 marks)