



UNIVERSITY OF EMBU

2021/2022 ACADEMIC YEAR

FIRST SEMESTER EXAMINATIONS

**FOURTH YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
IN WATER RESOURCE MANAGEMENT**

ASS 402: WATERSHED MANAGEMENT

DATE: NOVEMBER 29,2021

TIME:11:00AM-1:00PM

INSTRUCTIONS:

Answer Question ONE and ANY Other TWO Questions.

QUESTION ONE (30 MARKS)

- a) Explain slope as a watershed characteristic (4 marks)
- b) Discuss the functions of a watershed (6 marks)
- c) Using an example describe the characteristics of headwater watersheds (6 marks)
- d) Explain the concept of water quality (4 marks)
- e) Describe four types of clouds (5 marks)
- f) Discuss the key stakeholders in watershed management (5 marks)



ISO 27001:2013 Certified

Knowledge Transforms



ISO 9001:2015 Certified

QUESTION TWO (20 MARKS)

- a) Explain the characteristics of a healthy watershed to a water resource manager in your home County (13 marks)
- b) Assess the reasons for shortage of water in an urban watershed (7 marks)

QUESTION THREE (20 MARKS)

- a) Explain the rationale of harvesting rain water in watershed management (11 marks)
- b) Discuss *Five by Nine* planting pits (9 Marks)

QUESTION FOUR (20 MARKS)

- a) Describe the land uses in River Rupingazi watershed (8 Marks)
- b) Evaluate possible forms of degradation of this watershed (12 Marks)

QUESTION FIVE (20 MARKS)

- a) Explain the role of the County government of Embu in watershed management (8marks)
- b) Discuss the measures that the County government of Embu can put in place to maintain watershed health (12 marks)

--END--

