



MACHAKOS UNIVERSITY

University Examinations For 2021/2022 Academic Year

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

THIRD YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF ENVIRONMENTAL SCIENCE

ENS 347: ENERGY RESOURCES MANAGEMENT

DATE: 14/12/2021

TIME: 8.30-10.30 AM

INSTRUCTIONS: Answer question ONE and TWO other questions

QUESTION ONE (COMPULSORY)(30 MARKS)

- a) Highlight the key factors that influence energy demand in an area. (10 marks)
- b) Briefly discuss the advantages of using renewable energy resources. (10 marks)
- c) Discuss the importance of energy resources in the development of your County. (10 marks)

QUESTION TWO (20 MARKS)

Discuss any FOUR impacts of non-renewable energy use on water resources and indicate how to deal with the impacts.

QUESTION THREE (20 MARKS)

Using a suitable example, discuss the steps you would follow in undertaking an energy audit in an area.

QUESTION FOUR (20 MARKS)

Discuss any five strategies to manage the adverse impacts of energy use on the atmosphere.

QUESTION FIVE (20 MARKS)

Discuss the challenges associated with energy resources planning in Kenya.