



**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY**

**(MMUST)**

**MAIN CAMPUS**

**MAIN EXAMINATIONS**

**2021 / 2022 ACADEMIC YEAR**

**FOURTH YEAR SECOND SEMESTER  
EXAMINATIONS**

**MAIN EXAMINATIONS**

**FOR**

**THE BACHELOR OF SCIENCE IN DISASTER PREPAREDNESS AND  
ENVIRONMENTAL TECHNOLOGY .**

**COURSE CODE: DPE 408**

**COURSE TITLE: ENERGY RESOURCES AND ENVIRONMENT**

**DATE: 22/04/2022**

**TIME: 3 - 5PM**

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**INSTRUCTIONS TO CANDIDATES**

Answer Question 1(ONE) and any other TWO Questions

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over.

**Question ONE (COMPULSORY 30 MARKS)**

- a) With the aid of a diagram, discuss the formation of fossil fuels. **(10 Marks)**
- b) Describe the industrial process involved in generating electricity from coal. **(10 Marks)**
- c) How do Renewable energy resources differ from Non-renewable energy resources? **(10 Marks)**

**Question TWO**

- a) Differentiate between Thermal energy and Chemical energy. **(5 Marks)**
- b) The sun is an energy resource that needs to be tapped and possibly solar power should replace geothermal power in Kenya's industries. Discuss using examples. **(15 Marks)**

**Question THREE**

- a) Name and describe any five (5) properties of energy. **(10 Marks)**
- b) Kenya has oil reserves in Turkana County. In your own opinion, what environmental impacts does this oil resource pose to the inhabitants of Turkana County? **(10 Marks)**

**Question FOUR**

- a) Name and discuss any five (5) environmental impacts that are derived from the utilization of Biomass fuels in Kenya. **(10 Marks)**
- b) What measures would you select to mitigate environmental impacts that are caused by the utilization of non-renewable energy resources? **(10 Marks)**