



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF SCIENCE AND  
TECHNOLOGY (MMUST)**

**UNIVERSITY SPECIAL/SUPPLEMENTARY  
EXAMINATIONS  
2021/2022 ACADEMIC YEAR**

**THIRD YEAR FIRST SEMESTER EXAMINATIONS**

**FOR THE DEGREE**

**OF**

**BACHELOR OF SCIENCE IN DISASTER MITIGATION AND SUSTAINABLE  
DEVELOPMENT**

**CODE: DSM 300**

**COURSE TITLE: SUSTAINABLE DEVELOPMENT**

**DATE: 26/7/2022 TIME: 8-10 AM**

**INSTRUCTIONS TO CANDIDATES**

- a) This paper consists of **FOUR (4)** questions
- b) Question **ONE** is **COMPULSORY**
- c) Attempt Question **ONE** and any other **TWO (2)** questions

**TIME: 2 Hours**

**MMUST observes ZERO tolerance in examination cheating  
This Paper consists of 2 printed pages, Please Turn Over**



**QUESTION ONE - COMPULSORY QUESTION (30 Marks)**

- (a) Explain, giving example, the meaning of the term “SUSTAINABILITY”. **(5 marks)**
- (b) What is “Agenda 21”? Name any FOUR (4) themes of Agenda 21. **(5 marks)**
- (c) Explain what each of the following principles mean pointing out how each principle contributes to sustainable development:
- (i) Principle of integration **(2 marks)**
  - (ii) Polluter pays principle **(3 marks)**
- (d) Discuss briefly any FIVE (5) critiques of the concept of ‘Sustainable development’. **(10 marks)**
- (e) With the help of a chart, discuss the relationships among the following concepts: Carrying capacity, Environmental equilibrium, Steady State economy, Environmental degradation, Sustainable Development and Environmental renewal. **(5 marks)**

**QUESTION TWO**

- (a) Examine the meaning of the following principles as used in relation to sustainable development: (i) the Principle of intergenerational equity (ii) Precautionary principle. **(10 marks)**
- (b) Discuss briefly the conditions guiding the application of each of the two principles named above. **(10 marks)**

**QUESTION THREE**

- (a) Discuss briefly the **functions** of the National Environment and Management Authority (NEMA) of Kenya. **(10 marks)**
- (b) Enumerate FIVE (5) **challenges** the authority experiences in working towards attaining sustainable development in Kenya. **(10 marks)**

**QUESTION FOUR**

- (a) Name any FOUR outcomes of the World Earth Conference on Environment and Development (WCED) held in Rio De Janeiro in 1992. **(10 marks)**
- (b) Explain how each of the named outcomes affects sustainable development. **(10 marks)**