



(University of Choice)

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

UNIVERSITY MAIN EXAMINATION

**2022/2023 ACADEMIC YEAR
MAIN CAMPUS**

FIRST YEAR SECOND SEMESTER EXAMINATIONS

**FOR THE DEGREE OF
MASTER OF SCIENCE IN CLIMATE CHANGE MITIGATION AND
ADAPTATION FOR SUSTAINABLE DEVELOPMENT**

COURSE CODE: DPM 802

**COURSE TITLE: CLIMATE CHANGE MITIGATION AND
ADAPTATION FOR SUSTAINABLE
DEVELOPMENT**

DATE: 18/4/2023

TIME: 2-5 PM

INSTRUCTIONS TO CANDIDATES

This paper contains **five (5)** questions

Question **one (1)** is **compulsory** {total = 30 Marks}

Attempt **any other three (3)** {total = 60 Marks} from the remaining questions

Be brief and to the point

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

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

SECTION 1: COMPULSORY {30 MARKS}

QUESTION ONE

The impact (I) of a given population on the environment can be decomposed into the product of three factors; population size (P) affluence per capita (A) and a unit impact per capita (C) of affluence which is related to the technologies used (T). Generate an equation connecting the four identities **(30 marks)**

SECTION II: ATTEMPT ANY OTHER THREE (3) QUESTIONS {60 MARKS}

QUESTION TWO

- a) Name types of wind breaks used in Kenya and Africa **(10 marks)**
- b) Relate the disaster management cycle to capacity building to climate change issues **(10 marks)**

QUESTION THREE

How can climate change contribute to intensified hurricanes and El Nino episodes in the world?

20 marks)

QUESTION FOUR

- a) Using examples, describe what is meant by coral bleaching **(10 marks)**
- b) How is coral bleaching related to stronger hurricanes **(10 marks)**

QUESTION FIVE

Explain the concept of sustainable development in the context of climate change adaptation.

(20 marks)