



(University of Choice)

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

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

THIRD YEAR SECOND SEMESTER EXAMINATIONS

MAIN EXAMINATION

FOR THE DEGREE OF

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

COURSE CODE: DPE 311

COURSE TITLE: FIRE SAFETY TECHNOLOGY

DATE: 19/4/2023

TIME: 3-5 PM

INSTRUCTIONS TO CANDIDATES

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

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

Attempt any other two (2) {total = 40 Marks} from the remaining questions.
Be brief and to the point.

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over

SECTION I: COMPULSORY {30 MARKS}

Question ONE

- a) Using relevant examples and with the aid of a diagram, explain the conditions that must be met for fire to occur
(5 Marks)
- b) As a fire risk expert contracted by your County Government, briefly discuss the relevant stages you will follow to conduct a fire risk assessment in the premises of the Governor's office.
(25 Marks)

SECTION II: ATTEMPT ANY OTHER TWO (2) QUESTIONS {40 MARKS}

Question TWO

The recommendation from the fire risk assessment states that life safety and property protection systems are an integral part of fire prevention measures. By explaining the mechanisms under which they function to put out a fire, discuss the various types of portable fire extinguishers.

(20 Marks)

Question THREE

A sprinkler system consists of pipes along a ceiling that contain water under pressure, with an additional source of water for a constant flow. As a consultant in fire safety in Kenya, discuss the main composition of a typical water sprinkler system

(20 Marks)

Question FOUR

Passive fire prevention measures are considered right from the building and site planning and in evacuation of occupants. Discuss

(20 Marks)

Question FIVE

Describe the typical procedure you would follow during evacuation in fire disaster in a public workplace

(20 Marks)

