



University of choice

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)
SCHOOL OF AGRICULTURE, VETERINARY SCIENCES AND
TECHNOLOGY (SAVET)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR**

**MAIN EXAMS
OF
BSC. IN FOOD SCIENCE AND TECHNOLOGY**

COURSE CODE: AET 102

COURSE TITLE: PRINCIPLES OF WORKSHOP PRACTICE

DATE: 18TH DEC, 2023

TIME: 8 – 10 AM

INSTRUCTIONS TO CANDIDATES

This paper is divided into two sections, **A and B**. Answer ALL Questions in SECTION A and any Two in SECTION B

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over

SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION (30 MARKS)

Q1

- a) Give **Three** duties of an employer in regards to employees PPE at workplace (6 marks)
- b) Discuss how you can protect yourself in the workshop against the following injuries.
- i. Eye
 - ii. Head (2 marks)
- c) Define the following terms
- i. Earmuffs
 - ii. Ear plugs (4 marks)
- d) Which are the **Three** things needed to start a fire (3 marks)
- e) Name the three types of production in manufacturing processes (3 marks)
- f) Distinguish between primary and secondary shaping processes (6 marks)
- g) With the aid of a diagram show the following Butt weld joints
- i. Single v- Butt Weld
 - ii. Double v- Butt weld (6 marks)

SECTION B. ATTEMPT ANY TWO QUESTIONS ONLY (40 MARKS)

Q2. Discuss the following welding positions

- a) Flat or down-hand welding position
- b) Horizontal welding position
- c) Vertical welding position
- d) Overhead welding position (20 marks)

Q3. During metal cutting, the metal immediately ahead of the cutting tool is severely compressed in a lathe machine operation, which results in heat being generated. Highlight any five types of cutting fluids that can be used during metal cutting operations. (20 marks)

Q4. To avoid various health and safety risks while using a drilling machine, state several ways that you can apply or avoid the risk of accidents.

(20 marks)