



# MACHAKOS UNIVERSITY

University Examinations for 2021/2022

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL AND MANUFACTURING ENGINEERING

FIRST YEAR FIRST SEMESTER EXAMINATION FOR

CERTIFICATE IN MOTOR VEHICLE ENGINEERING

## BODYWORK

DATE:

TIME:

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### INSTRUCTIONS

- This paper consists of FIVE questions
- Answer all questions

- Name and explain FIVE safety measures one should observe while working in a vehicle body work. (10 marks)
  - List FIVE general rules in an automotive workshop (10 marks)
- With aid of a diagram explain the fire triangle. (8 marks)
  - Explain any THREE classes of fire. (12 marks)
- Name, explain and sketch FIVE vehicle body shapes. (20 marks)
- Name and sketch any THREE frame sections used in motor vehicle construction. (9 marks)
  - Sketch a commercial vehicle chassis frame and name the parts and sections (11 marks)
- Give at least FOUR functions of chassis frame in a motor vehicle. (4 marks)
  - Differentiate between **Unibody construction** and **Full frame** methods of chassis construction in a motor vehicle. (16 marks)