

### **MACHAKOS UNIVERSITY**

## **SCHOOL OF ENGINEERING**

#### **DEPARTMENT OF MECHANICAL ENGINEERING**

#### SECOND YEAR SECOND SEMESTER

#### **DIPLOMA IN MECHANICAL ENGINEERING**

#### VEHICLE BODY WORK AND PRACTICE II

## 2 HOURS

#### **INSTRUCTIONS**

# Answer Q1 and any other TWO Questions

Q1 a) Using a well labeled diagram explain the construction of the following body parts

i. The bumper

ii. the grille 10 marks

b) Using a well labeled diagram, explain how the vehicle chassis is checked for misalignment 20 marks

Q2. State the functions of the vehicle chassis 3 marks

b)using sketches explain the construction of the vehicle chassis 17 marks

Q3a) Illustrate the oxy acetylene welding equipment 6 marks

b) With the aid of a diagram, explain the RIGHTWARD and the LEFTWARD GAS welding techniques

14 marks

Q4. A vehicle has been brought to the body workshop after collision involving the front panels, explain the procedure you will follow to repair the damage **20 marks** 

Q5. Illustrate any **FIVE** types of butt joints practiced in ARC WELDING **10 MARKS** 

b) Explain how you will weld a cracked chassis member by using arc welding 10 MARKS