

MURANG'A UNIVERSITY COLLEGE

(A Constituent College of Jomo Kenyatta University of Agriculture & Technology)

SCHOOL OF ENGINEERING AND TECHNOLOGY

MECHANICAL ENGINEERING DEPARTMENT CRAFT CERTIFICATE IN AUTOMOTIVE ENGINEERING CLASS: CAE/14C CODE: SEM 0107

VEHICLE BODY WORK

END OF TERM 3 EXAMINATION

DATE: 31st MARCH 2015 TIME: 3 HOURS

<u>Instructions to the candidate</u>: Attempt ALL the questions.

- 1. a) Illustrate the following parts on a saloon car
 - i) Bonnet
 - ii) Windscreen
 - iii) Front fender
 - iv) A-post
 - v) Cant sill
 - vi) D-post (6mks)
 - b) Using sketches, describe the following chassis alignment checks
 - i) plumb line check
 - ii) chassis alignment
 - iii) wheel base check

(4mks)

- 2. Using sketches, explain the characteristics of the following vehicle body structures:
 - a) Pick up
 - b) Hatch back
 - c) Estate car
 - d) Salon vehicle

(10 marks)

- 3.a) During the roughing out damage process on a dented area of a vehicle, mainly two techniques are normally used. Name them and use sketches to briefly explain them.

 (3mks)
- b) Name **FOUR** parts of a standard spray painting gun. (3 marks)
- b) State the dangers of holding spray painting gun too close or too farto the surface

(2marks)

- c) State the kind of maintenance to be carried out on spray painting gun after use. (2 marks)
- 4. a) Explain using sketches the functions of the following vehicle body tools:
 - (i) Dolly
 - (ii) Shrinking hammer
 - (iii) Spoon
 - (iv) Picking hammer

(4marks)

- **b)** Explain the procedure followed during painting preparation after repair of a dent. (6mks)
- 5. a) Using simple sketches, show the two methods of vehicle hood installation. (6mks)
 - b) Explain at least one advantage and one disadvantage of each of the methods shown in 4(a) above. (4mks)