



TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Engineering and Technology

DEPARTMENT OF MECHANICAL AND AUTOMOTIVE ENGINEERING

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN MECHANICAL ENGINEERING (DMEN 6)

EAU 2307 AUTO ELECTRICAL TECHNOLOGY AND PRACTICE III

END OF SEMESTER EXAMINATION

SERIES: DEC 2016 PAPER-A

TIME: 2 HOURS

DATE: 2016

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Answer **TWO** questions from section **A** and **ONE** Question from section **B**.

Do not write on the question paper.

SECTION A

Answer any Two Questions from this section

Question One

(a) State four functions of an air-conditioning system fitted in the vehicle

(4 marks)

(b) Name two components in an air conditioning system that are responsible for conducting heat away from the interior of a vehicle, and state the function that each performs.

(4 marks)

- (c) With the aid of a sketch, explain the operation of an air conditioning system fitted in the vehicle.

(12 marks)

Question Two

Describe any four features fitted in a vehicle to enhance its security and that of its occupants.

(20 marks)

Question Three

- (a) State any three advantages and three disadvantages of the electronic fuel injection system

(6 marks)

- (b) With the aid of a diagram, explain the operation of the electronic fuel injection management system.

(14 marks)

SECTION B

Answer ONE question from this section

Question Four

Outline a typical procedure to carry out installation of a radio in a car.

(20 marks)

Question Five

Describe a step-by-step procedure to diagnose electronically controlled transmission system

(20 marks)