



# MACHAKOS UNIVERSITY

University Examinations 2018/2019

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL AND MANUFACTURING ENGINEERING

SECOND YEAR SECOND SEMESTER EXAMINATION FOR

DIPLOMA IN MOTOR VEHICLE ENGINEERING

VEHICLE ELECTRICS AND ELECTRONICS 2

DATE: 6/5/2019

TIME: 2.00-4.00 PM

---

## INSTRUCTIONS:

**Answer Question One (Compulsory) and Any Other Two Questions**

### QUESTION ONE (30 MARKS)

- a) State FIVE components of charging system. (5 marks)
- b) With the aid of a labeled diagram, explain the operation of the horn relay. (10 marks)
- c) With the aid of a sketch, explain the operation of electronic regulator. (15 marks)
- d)

### QUESTION TWO (20 MARKS)

Explain the operation of the limit switch in wiper motors using a sketch. (20 marks)

### QUESTION THREE (20 MARKS)

- a) Name FIVE types of gauges in a motor vehicle. (5 marks)
- b) With the aid of a sketch, explain the operation of a bimetallic fuel gauge. (15 marks)

### QUESTION FOUR (20 MARKS)

Explain the procedure of servicing and repairing a faulty wiper motor.

### QUESTION FIVE (20 MARKS)

With the aid of a diagram, explain the operation of high frequency horn.