



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations for 2015/2016

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL AND MANUFACTURING ENGINEERING

FIRST SEMESTER EXAMINATION FOR DIPLOMA IN MOTOR VEHICLE ENGINEERING

ENGINE TECHNOLOGY & PRACTICE

DATE: 12/8/2016

TIME: 8:30 -10:30 AM

INSTRUCTIONS:

Answer question N0. 1 and any other two questions.

1.
 - i) State any five safety rules to be observed in the automotive workshop. (5 marks)
 - ii) List any five tools used in the engine shop. (5 marks)
 - iii) Explain the following terminologies
 - a) Stroke (3 marks)
 - b) Cylinder bore (3 marks)
 - c) Compression ratio (4 marks)
 - iv) State five methods used to identify engines. (10 marks)
2. With the aid of sketches, explain the strokes of a four stroke cycle petrol engine (20 marks)
3. With the aid of sketches, explain the operation of a two-stroke petrol engine. (20 marks)
4. Explain the procedure for dismantling and servicing the cylinder head of a petrol engine (20 marks)
5. Explain the procedure for fitting piston rings to the ring grooves and installing the piston into the cylinder. (20 marks)