

MACHAKOS UNIVERSITY
2ND SEMESTER EXAMINATION FOR ARTISAN YEAR 1 2019
MOTOR VEHICLE TRADE THEORY FOR ARTISAN
INSTRUCTIONS: ANSWER ALL FIVE QUESTIONS IN THE
ANSWER SHEET.

Q1 (a) Name any two types of petrol Engine (4mks)

b) What are the reasons for the use of multi-cylinder Engines in preference to single cylinder engines of equal power (4Mks)

c) Draw a two stroke cycle petrol engine and name the parts (12 Mks).

Q2 (a) State the four strokes in a four stroke cycle engine (4Mks)

b) With aid of sketches explain what takes place in the cylinder during each of the four strokes in Q2a above (16 Mks).

Q3a) State the function of water in the cooling of a running engine (3mrks).

b) With the aid of a sketch explain thermo-siphon cooling system (17 Mks).

Q4 (a) State the functions of a carburetor in a petrol engine (3Mks)

b) State the proportion of air to petrol by weight, for the following operating conditions.(4Mks)

i) Starting

ii) Idling

iii) Maximum power

iv) Economy

d) Describe briefly the construction of petrol tank.(13Mks)

Q5 Sketch a typical layout for a fuel system on a modern motor car. Indicate the positions and state the purpose of any flexible pipes shown in your sketch. (20Mks).