

AUTO MECHANICAL WORK

EXAMINATION SCHEME

There will be three papers, Papers 1, 2 and 3 all of which must be taken.
Papers 1 and 2 shall be a composite paper to be taken at one sitting.

Paper 1: will consist of forty multiple-choice objective questions all of which are to be answered in 45 minutes for 40 marks.

Paper 2: will consist of two sections, Sections A and B to be answered in 2 hours 15 minutes for 80 marks.

Section A: will consist of ten short-structured questions to be answered in 30 minutes for 20 marks.

Section B: will consist of five essay questions. Candidates will be required to answer any four in 1 hour 45 minutes for 60 marks.

Paper 3: will be a practical test of 2 hours 30 minutes duration. It will consist of two compulsory questions for 80 marks.

A list of materials shall be made available to schools not less than two weeks before the paper is taken for material procurement and relevant preparation.

(Alternative to Practical Test)

The Council may consider testing candidates' ability in practical work as prescribed in the syllabus in the event that materials for the actual practical test cannot be acquired. For this alternative test, there will be two sets of compulsory questions to be answered in 1½ hours for 80 marks.

SAMPLE QUESTIONS

(OBJECTIVE)

1. The instrument used in checking valve clearance is
 - A. feeler guage.
 - B. ring guage.
 - C. ping guage.
 - D. fine bar.

2. The principal components of motor vehicle transmission layout are
 - A. flywheel, final drive and differential unit.
 - B. engine ,clutch, gearbox, propeller shaft and final drive.
 - C. gearbox, propeller shaft, flywheel and clutch.
 - D. clutch, differential unit and starter unit.

3. The strength of a frame to the twist force is known as
 - A. bending strength.
 - B. tension-pull strength.
 - C. tabular strength.
 - D torsional strength.

4. Which of the following is used in making compression rings of engine pistons?
 - A. Copper
 - B. Cast iron
 - C. High carbon steel
 - D. Sodium

5. Tyre threads are designed to enhance road
 - A. grip.
 - B. slip.
 - C. speed.
 - D. slide.

6. The material for making brake lining is
 - A. asbestos.
 - B. wood.
 - C. ceramics.
 - D. plastics.

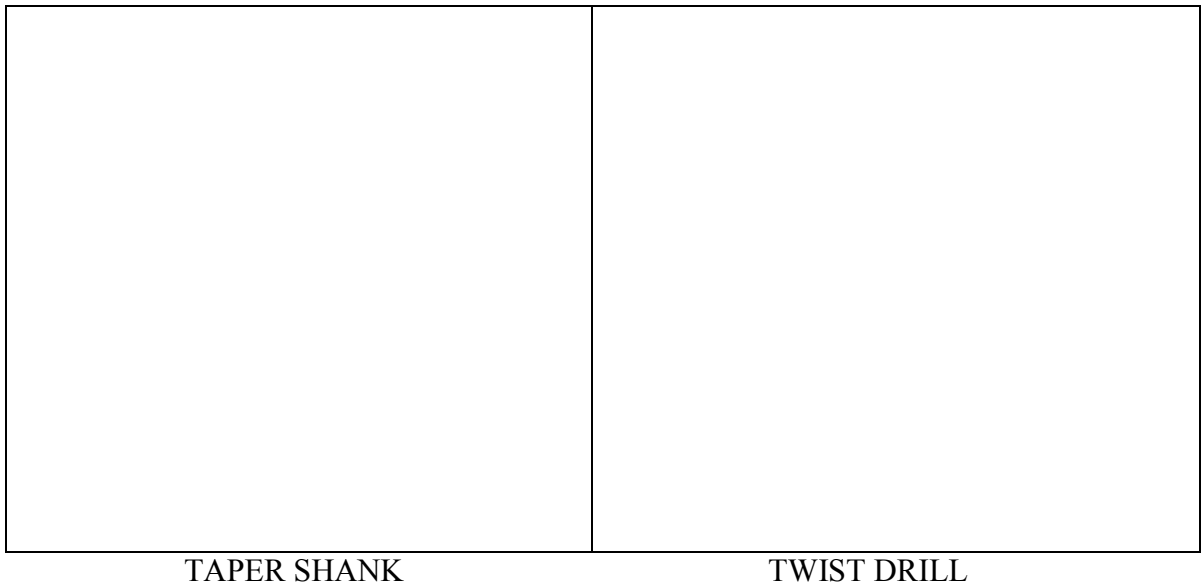
7. Air filter is fitted on which of these engine parts ?
 - A. Induction manifold
 - B. Inlet manifold
 - C. Carburetor
 - D. Cylinder head

PAPER 2
SECTION A
(SHORT STRUCTURED)

1. The part of the car that cools the engine is -----

2. The part of engine that drives the water pump is -----

- 3 Sketch a ‘Taper Shank’, twist drill and label three parts in the spaces provided below.



SECTION B
(THEORY)

- 1 (a) (i) Sketch a diagram of a four-stroke single cylinder engine during induction Stroke
- (ii) Label **four** of its parts.
- (b) State **one** function of each of the parts labelled in (1a) above. (15 marks)
- 2 (a) (i) Name **five** components of transmission system.
- (ii) State **one** function of each component listed in 2(a)(i). (15 marks)
- 1 On the engine provided set the valves to number one cylinder.
- (a) Open the valve cover, report to the examiner
- (b) Rotate engine to make the number one valve ready for setting, report to examiner
- (c) set the valves ,report to the examiner.
- (d) replace valve cover, report to the examiner.
- (e) answer **two** questions from the examiner.

