

071604T4AUT

AUTOMOTIVE TECHNOLOGY LEVEL 4

ENG/CU/AUT/CR/1/4/A

PERFORM VEHICLE BASIC MAINTENANCE

July/August 2024



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION
COUNCIL (TVET CDACC)**

WRITTEN ASSESSMENT

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATE

1. This paper consists of two sections; **A** and **B**
2. Answer **ALL** the question as guided in each section
3. Marks for each question are as indicated in the brackets
4. You are provided with a separate answer booklet to answer the questions
5. Do not write in this question paper

This paper consists of FOUR (4) printed pages

Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing

SECTION A: (10 MARKS)

(Attempt all questions in this section. Each question carries 1 mark)

1. Maintaining motor vehicle braking system involves several practices, which among the following is a practice performed in braking system.
 - A. Applying grease on disc rotor.
 - B. Inspecting brake pads for wear.
 - C. Cleaning the air filter.
 - D. Removing brake pedal.

2. Engine is one of the major components in a Motor vehicle that requires regular checks, which of the tasks below involves performing engine maintenance.
 - A. Checking brake fluid level.
 - B. Inspecting suspension components.
 - C. Changing engine oil and filter.
 - D. Changing transmission fluid.

3. ----- is a check conducted in steering system.
 - A. Checking battery voltage.
 - B. Checking tyre tread depth.
 - C. Checking wheel alignment.
 - D. Cleaning the interior.

4. Identify among the following a key practice in performing electrical system basic maintenance.
 - A) Checking coolant level.
 - B) Inspecting brake hoses.
 - C) Testing battery voltage.
 - D) Cleaning the windshield.

5. Which activity is not practice of performing wheels and tyres basic service.
 - A) Alignment.
 - B) Wheel balancing.
 - C) Puncture repair.
 - D) Performing bleeding.

6. Several components should be inspected during braking system service, which among the following is not a common practice done on brakes.
 - A) Adjustment.

- B) Bleeding.
 - C) Bush replacement.
 - D) Fluid level check.
7. In engine basic maintenance, which among the following component is checked, cleaned and replaced regularly.
- A) Fuel injectors.
 - B) Door handles.
 - C) Side mirrors.
 - D) Air filter.
8. Which of the following is a practice in performing suspension systems basic maintenance.
- A) Checking tire pressure.
 - B) Replacing wheel hub.
 - C) Replacing stabilizer links.
 - D) Replacing tie rods.
9. During maintenance of manual transmission system, the following components are checked and replaced except.
- A. Release bearing.
 - B. Pressure plate.
 - C. Clutch friction lining.
 - D. Constant velocity joint.
10. The following tools and equipment are used during tyres repair, which among the following is not.
- A. Tyre lever.
 - B. Patch.
 - C. Adhesives.
 - D. Feeler gauge.

SECTION B: (40 MARKS)

(Attempt ALL questions in this section)

11. State **three** maintenance practices which can be carried out during brake pad replacement. (3 Marks)
12. Name **four** tools that are used when servicing brakes. (4 Marks)
13. Highlight **five** steps of changing engine oil and filter as part of engine maintenance. (5 Marks)
14. State the function of the following components of a vehicle hydraulic braking system. (5 Marks)
 - i. Reservoir
 - ii. Calliper
 - iii. Wheel cylinder
 - iv. Brake booster
 - v. Wheel speed sensors
15. Explain the importance of checking and maintaining proper tyre inflation during wheel and tyres maintenance. (5 Marks)
16. State **three** types of suspension system. (3 Marks)
17. Outline **four** tools required during spark plug replacement. (4 Marks)
18. Outline **four** steps of testing battery voltage during electrical system basic maintenance. (4 Marks)
19. List **four** common signs of a failing alternator. (4 Marks)
20. List **three** types transmission systems used in automobile industry. (3 Marks)

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