

071604T4AUT

AUTOMOTIVE TECHNOLOGY LEVEL 4

ENG/OS/AUT/CC/4 /4/A

PERFORM WORKSHOP TECHNOLOGY APPLICATIONS

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 question is missing

SECTION A: (10 MARKS)

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

1. A protractor is used for _____.
 - A. Measuring lengths
 - B. Measuring angles
 - C. Finishing a drawing
 - D. Scaling a drawing
2. One of the following is a good maintenance practice for workshop tools.
 - A. Leave the tools in the workshop for the technician
 - B. Clean after use
 - C. Heap the tools together
 - D. Wash the tools with water
3. An operational plan is _____.
 - A. A plan to operate a machine
 - B. A document outlining activities to be performed and tools that will be used
 - C. Legal document of a vehicle
 - D. Plan to build a house
4. _____ is not a measuring tool.
 - A. Tape measure
 - B. Vernier caliper
 - C. Scriber
 - D. Micrometer screw gauge
5. The following are joining operations except.
 - A. Brazing
 - B. Riveting
 - C. Hammering
 - D. Welding
6. Define striking tools.
 - A. Tools that refuse to function
 - B. Well maintained tools
 - C. Heavy tools
 - D. Tools used to hit a workpiece by application of external force

7. Hazardous wastes are _____.
- A. Disposable wastes
 - B. Harmless wastes
 - C. Wastes that pose significant harm to human health or environment
 - D. Chemical wastes disposed in water.
8. Which among the following is not a view in orthographic drawing.
- A. Plan
 - B. Compass
 - C. Front view
 - D. End view
9. Polishing is _____.
- A. Adding external material to a workpiece
 - B. Good use of a grinder
 - C. Finishing process that creates a smooth surface to the workpiece
 - D. Reducing the cost of a material
10. The following are personal protective equipment used in mechanical workshop except.
- A. Leather jacket
 - B. Gloves
 - C. Goggles
 - D. Overall

SECTION B: (40 MARKS)

(Attempt all questions in this section)

11. Outline any **four** marking out tools used by an auto mechanic. (4 Marks)
12. Explain the difference between draw filing and cross-filing using sketches. (6 Marks)
13. Sketch a hacksaw and name its parts. (5 Marks)
14. Identify any **three** finishing operations that can be performed on a metallic workpiece. (3 Marks)
15. Figure 1 shows two parts A and B joined together. Suggest any two joining methods that could be used. (2 Marks)

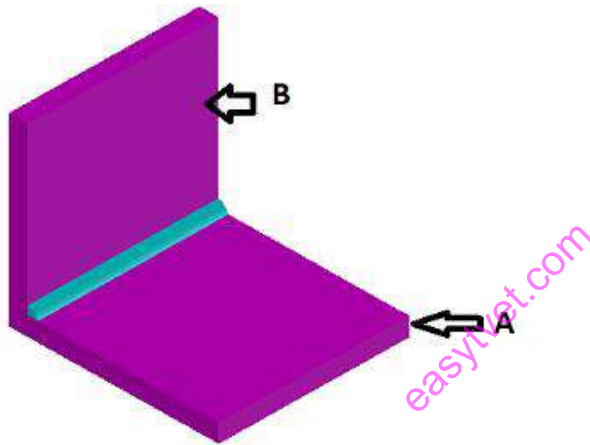


Fig 1

16. Prepare an operational plan for fabrication of the workpiece in **fig 1** above if it was to be cut from a 6 mm mild steel plate using hand tools. (6 Marks)
17. State any **four** waste disposal methods. (4 Marks)
18. State any **four** housekeeping practices carried out in an automotive workshop. (4 Marks)
19. Outline any **four** maintenance practices on mechanical vices. (4 Marks)
20. Explain the function of a surface gauge using examples. (2 Marks)