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Date: 25.07.2025 11:44 AM

#### 071504T4 MAM

## WELDING (MANUAL METAL ARC) LEVEL 4

ENG/OS/WEF/C<sub>1</sub>R<sub>1</sub>/02/4y: Technical And Vocational College

Perform Gas Metalle A25c Wetding AM

July/August 2025



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

#### WRITTEN ASSESSMENT

Printed Technical And Vocational College Date: 25.07.2025 11:44

AM

**TIME: 2 HOURS** 

## INSTRUCTIONS TO CANDIDATE:

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- 1. This paper has **TWO** sections: **A** and **B**;
- 2. Answer **ALL** questions in sections **A** and **B**;
- P3.te You Far with a separate answer booklet;

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4. Marks for each question are as indicated;

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5. Do not write on the question paper.

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### This paper consists of FOUR (4) printed pages

Candidates should check the question paper to ascertain that all pages are printed as Printed And Vocational College

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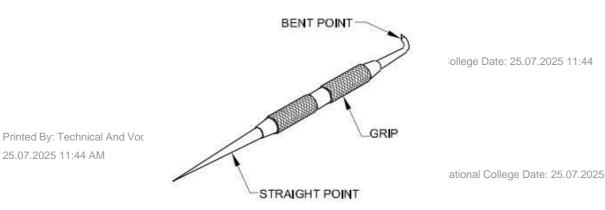
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## **SECTION A: (10 MARKS)**

# Answer ALL quis section. Each question carries one mark

1.	Date: 25.07.2026yel p4otlection is not appropriate when performing Gas Metal					
	Arc Welding (GMAW).					
	A. Auto-darkening welding helmet with proper shade lens  Printed By: Technical And Vocational College  B. Safety goggles designed for grinding operations					
	C. Welding helmet with shade number appropriate for GMAW					
	D. Face shield combined with safety glasses $f \circ radd \circ n$ Date: 25.07.2025 11:44 AM					
2.	Shielding gasto the weld pool during GMAW.					
	A Cool the arc					

- A. Cool the arc
- B. Increase spatter
- C. Prevent contamination from air
- D. Reduce wire feed speed
- 3. The tool shown below is a \_\_\_\_\_used for marking out during material Printed By: And Vocational College Date: preparation in welding.



- A. Vernier height gauge
- B. Welding needle Printed By: Technical And Vocational College Date: 25.07.2025 11:44 AM
- C. Scriber
- D. Dot punch

# The ethe functions of Metal Inert gas (MIG) welding torch. Which one is

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- A. Feeding the filler wire
- B. Improving the performance of the weld.
- C. Delivering shielding gas
- D. Conducting welding current.



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Date:	25.07.	2025 11:44 AM	ling position is the easie	st for beginners in GMAW.	
J.		Flat	ing position is the easie	st for beginners in Givii v.	
			y Technical And Vocational Colle		
		Horizont <sup>D</sup> a <sup>a</sup> l <sup>te: 25</sup>		ge	
		Overhead			
6.	An operator performed pre-heating before welding, highlight the reason for that.				
0.	Printed By Technical And Vocational College  A. To activate electro de flix				
	B.	To prevent crac	king and thermal shock		
	C.	To increase wel	ding speed	Printed By And Vocational College Date: 25.07.2025 11:44 AN	
	D.	To make weldi	ng easier.		
7.	Durir	During welding operation, the welder realised that using excessive current caused a			
	certain defect, identify the defect.				
	A.	spatter			
	B.	Lack of fusion			
		Cracking  nical And Vocational Craters AM	College Date:		
9.	MAG	G Stand for		in welding.	
	A.	Metal Active ga	as		
	B.	Manual actual g	gun.	Printed By And Vocational College Date: 25.07.2025 11:44	
	C.	Metal actual gu	n	AM	
		Manual active g			
10. P	A weldimprises of various hand tooks Identify the function of a wire brush.  Output: 25.07.2025 11:44 AM				
		Tacking the par	ts together	Printed By And Vocational College Date: 25.07.2025 11:44 AN	
	B.	Weld dressing			
	C.	Cleaning base n	netal		
D. Removing slag  Printed By: Technical And Vocational College Date: 25.07.2025 11:44 AM					

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### **SECTION B: (40 MARKS)**

# Answer ALL questions in this section.

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- 11. A welder wishes to set up. a new MIG welding station. Identify FOUR Components of a MIG machine set up. (4 Marks)
- 12. While performing MIG welding process list FOUR factors to consider to produce a high-quality natacle of h. Technical And Vocatoral College (4 Marks)
- 13. You are required to prepare metal joint before performing MIG welding. List FOUR measuring tools you might use.

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- 14. Alice is welding a structural frame using the GMAW op roce ests : 4\$ he is working in a poorly lit and damp area without proper personal protective equipment. List FIVE risks she might be exposed to. (4 Marks)
- 15. Welded parts were tested and some were defective. State FOUR defects associated with GMAW. (4 Marks)
- 16. Symbols helps a welder to interpret drawing during welding. List THREE components of

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- 17. A client brought a drawing of the component to be produced, after interpretation, it was realized that it would involve several welding positions as given below, identify the welding positions. (4 Marks)



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- 18. A competent welder droeassee \$5a011.11h25 wte4ds\after welding. Identify FOUR reasons for carrying out weld dressing. (4 Marks)
- 19. Your friend who successfully completed a welding course plans to open a fabrication

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  (4 Marks)
- 20. A MIG welder wishes to dispose wastes appropriately. List FOUR ways of proper waste disposal he can adopt. (4 Marks)