

**Written Assessment Guide**

**For**

**“ Dies and Moulds  
Technology”**

**Level-3**

**(Summative Assessment)**

**1<sup>st</sup> -5<sup>th</sup> March 2021**



**National Vocational & Technical  
Training Commission**

<b>Title of Qualification:</b> National Vocational Certificate Level 3, in (Dies and Mould Technology) "CNC Machinist"	CS Code:	Level: 3	Version: 01
<b>Competency Standard Title:</b> Identify and implement Workplace Policies and Procedures Apply work health and safety practices (WHS) Communicate at workplace Perform CNC Lathe operations Perform Advance Milling Operations Perform 2D & 3D Engineering Drawings using CAD Software Perform Welding Operations	<b>Assessment Date (DD/MM/YY):</b>  <b>Assessment Time:</b> 30 min		

Guidance for Candidate	<b>To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.</b>
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**Assessors Guide** (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name: ..... Registration/Roll Number: Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: ..... Assessor's code: Signature of the Assessor:.....

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#### WRITTEN ASSESSMENT

Question	Candidate's answer
1. What is the full form of ATC?	A. Automatic tool changer
2. What different operations can be done on CNC Lathe Machine?	A. Turning, Facing, Boring, Drilling, Grooving, Knurling, Parting, Threading etc.
3. What are the axes on a CNC lathe?	A. X axis (Diameter), and a Z axis (Length)
4. How many coordinate systems are used in CNC Lathe and their names?	A. Two (Absolute and Incremental Coordinate System)

Question	Candidate's answer
5. State any three (03) M Codes and their purpose?	A. M0: Program stop (press Cycle Start to continue) M1: Optional stop (only executed if the switch on the CNC control is ON) M2: End of program M3: Spindle rotation clockwise M4: Spindle rotation counterclockwise M5: Spindle stop M6: Change tool M8: Coolant on M9: Coolant off M30: End program and press Cycle Start to run it again
6. State different types of machining can be done by milling machine?	A. Face milling, Plain or slab milling, Angular milling, Form milling, Cutting keyways, slots and grooves, gears, etc
7. Enlist different types of milling methods?	A. Conventional milling (Up Milling), Climb milling (Down Milling)
8. What material the Milling Cutters are usually made of?	A. High speed steel, cemented tipped, super high speed steel etc.
9. Which attachment is used for doing Indexing?	A. Indexing Head / Dividing Head
10. Short keys: Lt B	A. Lt scale Block
11. Short key: C J	A. Circle Join
12. Short key: Mi Ro	A. Mirror Rotate

Question	Candidate's answer
13. AR 14. PL	A. Array Pline
15. Enlist the five major types of welding joints?	A. i. Butt Joint ii. Tee Joint iii. Lap Joint iv. Corner Joint v. Edge Joint
16. Enlist any four types of fusion welding?	A. i. Arc welding ii. Laser welding iii. Induction welding iv. Oxy-fuel welding v. Solid Reactant welding
17. Enlist any three types of resistance welding?	A. i. Spot welding ii. Seam welding iii. Flash welding
18. Enlist the any three types of communication?	A. <ul style="list-style-type: none"> <li>• Verbal Communication.</li> <li>• Non-verbal / Interpersonal communication.</li> <li>• Written Communications.</li> <li>• Formal &amp; Informal</li> <li>• Visual Communication</li> </ul>
19. What is occupational health and hygiene?	The definition used by IOHA is: 'Occupational Hygiene is the discipline of anticipating, recognizing, evaluating and controlling health hazards in the working environment with the objective of protecting worker health and well-being and safeguarding the community at large.
20. Model of Communication SMCR is stands for?	Sender-Message-Channel-Receiver (SMCR)

