

**Written Assessment Guide**  
**For**  
**“Dies & Moulds**  
**Technology”**  
**Level -5**

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



**National Vocational & Technical**  
**Training Commission**

<b>Title of Qualification:</b> National Vocational Certificate Level 5, in (Dies and Mould Technology) “Associate Engineer”	CS Code:	Level:5	Version:
<b>Competency Standard Title:</b> Design Moulds Design Dies Manufacture Die and Mould Components	<b>Assessment Date (DD/MM/YY):</b>  <b>Assessment Time: 60 min</b>		

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: .....

<b>Title of Qualification:</b> National Vocational Certificate Level 5, in (Dies and Mould Technology) “Associate Engineer”	CS Code:	Level:5	Version:
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### WRITTEN ASSESSMENT

Question	Candidate's answer
1. What is the Shrinkage Process?	A. In the Molding process, injected resin into the cavity will be under the holding pressure. This pressure will be shut off when the gate is sealed after that the resin starts to shrink as the temperature goes down.
2. Enlist the basic parts of press tool?	A. <ul style="list-style-type: none"> <li>• Die block</li> <li>• Punch block</li> <li>• Punch holding plate</li> <li>• Stripper plate</li> <li>• Back up plate</li> </ul>
3. State the common types of Dies?	A. Piercing die, Blanking die, Compound die, Bending die etc.
4. What is the purpose of stripper plate?	A. It is used to guide the strip
5. Enlist the types of mold guides?	A. <ul style="list-style-type: none"> <li>• Headed Type,</li> <li>• Step Type</li> <li>• Straight Type</li> </ul>
6. State the basic types of molds by structure?	A. <ul style="list-style-type: none"> <li>• 2-Plate mold structure</li> <li>• 3- Plate mold structure</li> </ul>

Question	Candidate's answer
7. Enlist the types of plastic?	<b>A.</b> <ul style="list-style-type: none"> <li>• Thermoplastic (can be recycled)</li> <li>• Thermosetting (cannot be recycled)</li> </ul>
8. What is core?	<b>A.</b> A core is a device used in casting and molding processes to produce internal cavities and reentrant angles (an interior angle that is greater than 180°).
9. Enlist any five basic die components?	<b>A.</b> <ul style="list-style-type: none"> <li>• Die plate, Shoes, Die sets</li> <li>• Bushings and Guide Pins</li> <li>• Heel Plates and Heel Blocks</li> <li>• Screws, Keys, and Dowels</li> <li>• Pads</li> <li>• Spools, Keepers and Shoulder Bolts</li> <li>• Retainer</li> <li>• Springs</li> </ul>
10. What is die spotting press?	<b>A.</b> Die spotting presses are used in the manufacturing and verification process of dies and moulds. Their dimensions are defined according to the die or mould to be retouched.
11. What is the assembly process?	<b>A.</b> An assembly line is a production process that divides up the labor process. It breaks up the manufacture of a good into steps that are completed in a pre-defined sequence.
12. What is assembly line?	<b>B.</b> Assembly lines are the most commonly used method in the mass production of products.
13. What is die spotting press?	<b>B.</b> Die spotting presses are used in the manufacturing and verification process of dies and moulds. Their dimensions are defined according to the die or mould to be retouched.
14. What is the assembly process?	<b>B.</b> An assembly line is a production process that divides up the labor process. It breaks up the manufacture of a good into steps that are completed in a pre-defined sequence.
15. What is assembly line?	<b>A.</b> Assembly lines are the most commonly used method in the mass production of products.

Question	Candidate's answer
16. What is mould assembly?	A. Mold assembly is one of the most critical steps of mold making procedure, all the parts machined or purchased need to be put together and required to be work functionality.
17. Enlist any five mold polishing methods?	A. <ul style="list-style-type: none"> <li>• Mechanical Polishing</li> <li>• Chemical Polishing</li> <li>• Electro polishing</li> <li>• Ultrasonic Polishing</li> <li>• Fluid Polishing</li> <li>• Magnetic Grinding &amp; Polishing</li> <li>• EDM-Ultrasonic Polishing</li> </ul>
18. What is the process of polishing?	A. Polishing is the process of creating a smooth and shiny surface by rubbing it or by applying a chemical treatment, leaving a clean surface with a significant specular reflection.
19. Enlist major types of portfolios?	A. <ul style="list-style-type: none"> <li>• Working portfolio</li> <li>• Display portfolio</li> <li>• Assessment portfolio</li> </ul>
20. What is internship?	An internship is an opportunity employer offer to students interested in gaining work experience in specific industries, and an important step to building a solid career.