

Written Assessment Guide
For
“Dies & Mould
Technology”

Level 4
Die and Mould Maintenance

1st -5th March 2021



National Vocational & Technical
Training Commission

Title of Qualification: National Vocational Certificate Level 4, (Dies and Mould Technology) "CAD/CAM Supervisor	CS Code:	Level:4	Version:
Competency Standard Title: Die and Mould Maintenance	Assessment Date (DD/MM/YY): Assessment Time: 30 min		

Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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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 ☐ NOT YET COMPETENT ☐ Name of the Assessor: Assessor's code: Signature of the Assessor:

Title of Qualification: National Vocational Certificate Level 4, (Dies and Mould Technology) “CAD/CAM Supervisor	CS Code:	Level:4	Version:
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WRITTEN ASSESSMENT

Question	Candidate's answer
1. What is molding?	A. Molding is the process of pouring liquid material into a certain container or mould so that it hardens in that customized shape
2. State the type of molding?	A. • Extrusion molding • Compression molding • Blow molding • Injection molding • Rotational molding
3. What is the best material to make a mold?	A. • Polyurethane • Polyester resins • Silicone rubbers
4. Enlist the name of any five press tools?	A. • Blanking tool. • Piercing tool. • Cut off tool. • Parting off tool. • Trimming tool. • Shaving tool. • Forming tool. • Drawing tool.

Question	Candidate's answer
5. State the stages of injection molding?	A. There are four stages in the cycle. These stages are the clamping, injection, cooling and ejection stages.
6. Enlist the four types of Injection Molding Technology?	A. 1. Thin Wall Molding. 2. Gas-assisted Injection Molding. 3. Metal Injection Molding. 4. Liquid Silicone Injection Molding. 5. 3D Printing. 6. Unique Material Formulations.
7. What is draft in molding?	A. Draft is the amount of taper for molded or cast parts perpendicular to the parting line. By tapering the sides of the mold by an appropriate "draft angle", for instance 2° (two degrees), the mold will be easier to remove.
8. What is ejection in mold?	A. Ejection is a process of removing the plastic material from the mold. This are of different types to remove the material from mold.
9. Enlist any five defects in molding?	A. 1. Flow lines 2. Burn marks 3. Warping 4. Air pockets/vacuum voids 5. Sink marks 6. Weld lines 7. Jetting 8. Discoloration 9. Delamination 10. Short shot 11. Flash
10. Enlist any five defects in die casting?	1. Blowhole 2. Sand inclusion 3. Cold lap/cold shut 4. Gas porosity 5. Mismatch defect

