

## SELF ASSESSMENT GUIDE

Qualification:	<b>MACHINING NC I</b>	
Project:	<b>CAP SCREW AND NUT</b>	
Instruction: <ul style="list-style-type: none"> <li>• Read each of the questions in the left-hand column of the chart.</li> <li>• Place a check in the appropriate box opposite each question to indicate your answers.</li> </ul>		
<b>Can I?</b>	<b>YES</b>	<b>NO</b>
• Determine job requirements(A written work plan listing the operation is required)		
• Perform Bench Work		
• Sawing, chiseling, filing		
○ Drilling, tapping, die thread cutting, reaming		
○ Off-hand grinding		
• Perform turning operation:		
○ Setup workpiece		
○ Facing and longitudinal turning		
○ Cutting grooves, recess, shoulders; knurls and parting off		
○ Drilling, boring, counterboring and countersinking		
○ Thread cutting V-threads: internal and external		
○ Cutting external taper: comp[ound table or formed tool		
• Perform milling operation		
○ Drilling and boring		
• Spot facing		
○ Milling slots and keyways		
○ Milling serrations		

○	Miling of vees		
○	Cutting off materials		
○	Milling circular slots		
●	Perform grinding operation		
○	Select grinding wheels and accessories		
○	Grinding parallel and square surfaces		
○	Grinding to an angle surface		
○	Grinding to radii		
○	Grinding to cut off parts		
●	Measures dimensions		
●	Check surface texture		
<p><b>I agree to undertake assessment in the knowledge that information gathered will only be used for professional development purposes and can only be accessed by concerned assessment personnel and my manager/supervisor.</b></p>			
Candidate's Name:		Date:	

## SELF - ASSESSMENT GUIDE

Qualification:	<b>MACHINING NC I</b>	
Certificate of Competency 1:	<b>PERFORM BENCH WORK (BASIC)</b>	
Instruction: <ul style="list-style-type: none"> <li>• Read each of the questions in the left-hand column of the chart.</li> <li>• Place a check in the appropriate box opposite each question to indicate your answers.</li> </ul>		
<b>Can I?</b>	<b>YES</b>	<b>NO</b>
<ul style="list-style-type: none"> <li>• Determine job requirement (A written work plan listing the operation is required)               <ul style="list-style-type: none"> <li>○ Determine the material to be used</li> <li>○ List down the sequence of operation</li> <li>○ List the tools to be used</li> </ul> </li> <li>• Set up workpiece, machine, and tools               <ul style="list-style-type: none"> <li>○ Clamp workpiece in bench vise</li> </ul> </li> <li>• Perform <b>bench work</b> operation               <ul style="list-style-type: none"> <li>○ Lay out and marks features on workpiece</li> <li>○ Cut flat, rectangular workpiece</li> <li>○ Chip flat, rectangular workpiece</li> <li>○ File flat, rectangular workpiece</li> <li>○ Drill, countersink, counterbore, and spotface hole</li> <li>○ Ream holes</li> <li>○ Lap holes</li> <li>○ Cut threads using tap</li> <li>○ Cut thread using stock and die</li> <li>○ Grind off-hand workpiece</li> </ul> </li> </ul>		

○ Grind off-hand twist drill		
• Observe safety procedures		
○ For personal safety		
○ For safety of tools and equipment		
○ For safety of others		
• Check / Measure workpiece		
○ Dimension using steel rule and vernier caliper		
○ Surface texture using comparators		
<b>I agree to undertake assessment in the knowledge that information gathered will only be used for professional development purposes and can only be accessed by concerned assessment personnel and my manager/supervisor.</b>		
<b>Candidate's Name:</b>	<b>Date:</b>	

## SELF ASSESSMENT GUIDE

Qualification:	<b>MACHINING NC I</b>	
Certificate of Competency 2:	<b>TURN WORKPIECE (BASIC)</b>	
Instruction: <ul style="list-style-type: none"> <li>• Read each of the questions in the left-hand column of the chart.</li> <li>• Place a check in the appropriate box opposite each question to indicate your answers.</li> </ul>		
<b>Can I?</b>	<b>YES</b>	<b>NO</b>
• Determine job requirement (A written work plan listing the operation is required)		
○ Interpret working drawings		
○ Determine sequence of operation		
○ Select cutting tools		
• Sets up workpiece, machine, and tools		
○ Use 3-jaw chuck and 4-jaw chuck, and between centers		
○ Use surface gage and dial indicator		
○ Observe safety precautions		
• Performs <b>turning</b> operation		
○ Facing		
○ straight turning		
○ Cutting recess and grooves		
○ Drilling, boring, countersink, and reaming		
○ knurling		
○ external threading: single-start Vee and Acme threads		
○ parting off		

○ cut thread using tap and stock and die		
○ taper turning: compound slide		
○ form tool		
• Check / Measure workpiece		
○ Dimension using vernier and micrometer and gages		
○ surface texture using comparators		
<b>I agree to undertake assessment in the knowledge that information gathered will only be used for professional development purposes and can only be accessed by concerned assessment personnel and my manager/supervisor.</b>		
<b>Candidate's Name:</b>	<b>Date:</b>	

## SELF ASSESSMENT GUIDE

Qualification:	<b>MACHINING NC I</b>	
Certificate of Competency 3:	<b>MILL WORKPIECE (BASIC)</b>	
Instruction: <ul style="list-style-type: none"> <li>• Read each of the questions in the left-hand column of the chart.</li> <li>• Place a check in the appropriate box opposite each question to indicate your answers.</li> </ul>		
<b>Can I?</b>	<b>YES</b>	<b>NO</b>
• Determine job requirement		
○ Determine tools to be used		
○ Determine rpm and feed rates		
• Set up workpiece		
○ Using vise		
○ Using clamps		
• Perform milling operation		
○ Drilling		
○ Boring		
○ Spot facing		
○ Slotting		
○ Milling keyways		
○ Milling serrations		
○ Milling vees		
○ Parting-off		
• Check workpiece using gages		

• Measure workpiece using vernier and micrometer calipers		
<b>I agree to undertake assessment in the knowledge that information gathered will only be used for professional development purposes and can only be accessed by concerned assessment personnel and my manager/supervisor.</b>		
<b>Candidate's Name:</b>	<b>Date:</b>	



## SELF ASSESSMENT GUIDE

Qualification:	<b>MACHINING NC I</b>	
Certificate of Competency 4:	<b>MILL WORKPIECE (BASIC)</b>	
Instruction: <ul style="list-style-type: none"> <li>• Read each of the questions in the left-hand column of the chart.</li> <li>• Place a check in the appropriate box opposite each question to indicate your answers.</li> </ul>		
<b>Can I?</b>	<b>YES</b>	<b>NO</b>
• Determine job requirement (A written work plan listing the operation is required)		
○ Interpret working drawings		
○ Determine sequence of operation		
○ Select tools to be used		
• Sets up workpiece, machine, and tool		
○ Select wheels and accessories		
○ Determine rpm and feed rates		
• Perform <b>grinding</b> operation		
○ Grinding parallel faces		
○ Grinding square surfaces		
○ Grinding angles		
○ Grinding to a square shoulder		
○ Grinding radii		
○ Grinding to cut-off parts		
○ Observed safety precautions		
• Check / Measure workpiece		
• Dimension using vernier and micrometer caliper, gages and dial indicators		

<ul style="list-style-type: none"> <li>• surface texture using comparators</li> </ul>		
<p><b>I agree to undertake assessment in the knowledge that information gathered will only be used for professional development purposes and can only be accessed by concerned assessment personnel and my manager/supervisor.</b></p>		
<p><b>Candidate's Name:</b></p>	<p><b>Date:</b></p>	