

# Assessment Evidence Guide

## For

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Level-2

**Module name**  
(Formative Assessment)

*8<sup>th</sup> -12<sup>th</sup> March 2021*



**National Vocational & Technical  
Training Commission**

<b>Title of Qualification:</b> Engineering Drawing (Level 2)	CS Code:	Level: 2	Version: 01
<b>Competency Standard Title:</b> Construct different Engineering Curves	<b>Assessment Date (DD/MM/YY):</b>  <b>Assessment Time:</b>		

Candidate Details	Name: .....  Registration/Roll Number:.....
Guidance for Candidate	<p><b>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration &amp; assessment) as per the instructions given in Annexure A:</b></p> <p><b>Assessment Task 1:</b> Candidate is required to: Construct Ellipse by rhombus method.</p> <p><b>Assessment Task 2:</b> Candidate is required to: Construct a parabola curve by rectangle methods</p> <p><b>Assessment Task 3:</b> Candidate is required to: Construct a Archimedean Spiral curve</p> <p><b>Assessment Task 4:</b> Candidate is required to: Draw involute and cycloid curve by circle of radius 5cm</p> <p><b>And complete:</b></p> <ol style="list-style-type: none"> <li><b>1. Knowledge assessment test (Written or Oral)</b></li> <li><b>2. Portfolios at the time of assessment (if any)</b></li> </ol>
Minimum Evidence Required	<p><b>During a practical assessment, under observation by an assessor, you will complete:</b></p> <p><b>Assessment Task 1</b></p> <ul style="list-style-type: none"> <li>• Prepare drawing sheet.</li> <li>• Draw an Ellipse by rhombus method</li> </ul> <p><b>Assessment Task 2</b></p> <ul style="list-style-type: none"> <li>• Construct a parabola curve by rectangle methods</li> </ul>

	<p><b>Assessment Task 3</b></p> <ul style="list-style-type: none"> <li>• Draw spiral curve.</li> </ul> <p><b>Assessment Task 4</b></p> <ul style="list-style-type: none"> <li>• Draw involute and cycloid curve by circle of radius 5cm</li> </ul>
	<p><b>Portfolios required at the time of assessment (if any) for</b></p>

*Continued on following page*

**Assessors Judgment 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: .....
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: ..... Assessor's code: ..... Signature of the Assessor: .....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement							

Each Assessment Task (with performance criteria)					
<b>Assessment Task 1</b>		<b>Description of assessment task 1</b>			
During the practical assessment, candidate demonstrated the following:			Yes	No	Remarks
1.	Prepare drawing sheet.				
2.	Draw an Ellipse by rhombus method				
Competent <input type="checkbox"/>			Not Yet Competent <input type="checkbox"/>		

<b>Assessment Task 2</b>		<b>Description of assessment task 2</b>			
During the practical assessment, candidate demonstrated the following:			Yes	No	Remarks
1.	Construct a parabola curve by rectangle methods				
Competent <input type="checkbox"/>			Not Yet Competent <input type="checkbox"/>		

<b>Assessment Task 3</b>		<b>Description of assessment task 2</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Draw spiral curve.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

<b>Assessment Task 4</b>		<b>Description of assessment task 2</b>		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Draw involute and cycloid curve by circle of radius 5cm			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

<b>Title of Qualification:</b> Engineering Drawing (Level 2)	CS Code:	Level: 2	Version: 01
<b>Competency Standard Title:</b> Construct different Engineering Curves	<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: .....

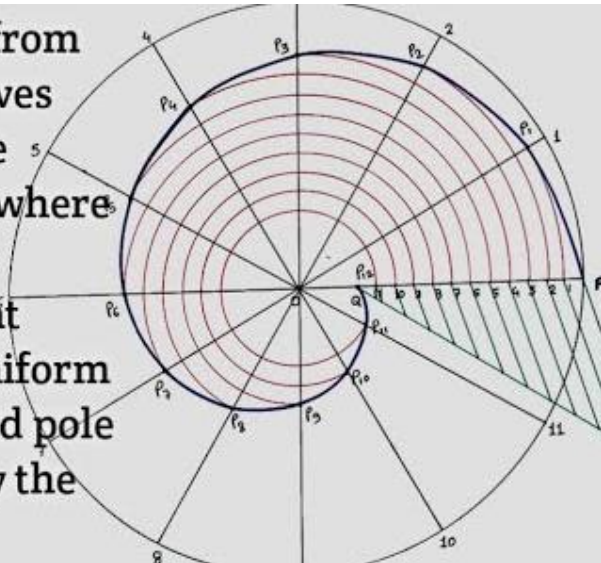
<b>Title of Qualification:</b> Engineering Drawing (Level 2)	CS Code:	Level:2	Version: 01
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### WRITTEN ASSESSMENT

Question	Candidate's answer
1. What is the application of cycloid curve?	<ul style="list-style-type: none"> <li>• design of gear tooth profiles</li> <li>• conveyor of mould box in foundry shop</li> </ul>
2. What is application of involute curve?	<ul style="list-style-type: none"> <li>• To make teeth for two revolving machines and gears</li> </ul>
3. Define epicycloid?	<ul style="list-style-type: none"> <li>• curve traced by a point on the circumference of a circle rolling on the exterior of another circle.</li> </ul>
4. Name any two method to draw parabola curve?	<ul style="list-style-type: none"> <li>• Oblong</li> <li>• Concentric circle</li> </ul>
5. Name any two method to draw ellipse curve?	<ul style="list-style-type: none"> <li>• Basic locus method</li> <li>• Rhombus method</li> </ul>

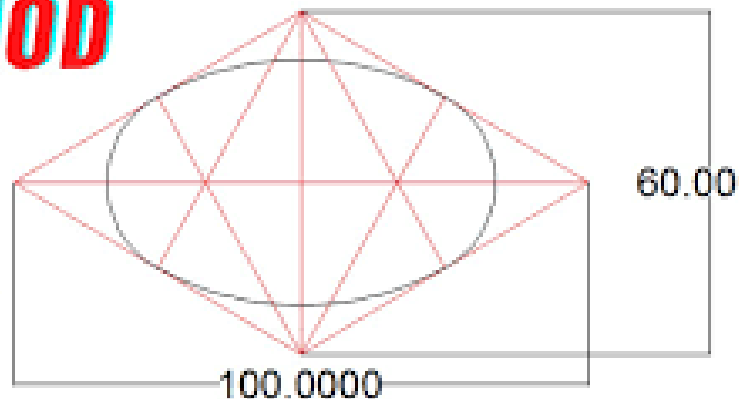
## Annexure A:

➔ A point P is 100 mm away from the fixed point O. A point P moves towards pole O and reaches the position Q in one convolution, where  $OQ=20$  mm. The point P moves in such a way that its movement towards fixed point O being uniform with its movement around fixed pole O. Draw the curve traced out by the point P. Name the curve.



## ELLIPSE BY RHOMBUS METHOD

MAJOR &  
MINOR  
AXIS



### Rectangle Method

- Q. Consider a ball thrown in air which attains 100 m height and covers horizontal distance of 150 m on ground.  
Draw the path of the ball (projectile)