

**GOVERNMENT POLYTECHNIC PUNE**  
**Model Answers & Marking scheme (ODD-2019)**

Course Name : Engg.Graphics

Course Code : ME2103

Q.No.	Sub-Que.	Model Answers	Marking scheme
①	a		<p>① min + major Dia = 02</p> <p>② divide circle in equal parts = 01</p> <p>③ pt location 01 marks</p> <p>④ curve + dimension 01</p>
①	b	<p align="center">SCALE - 1:2</p>	<p>① locating focus = 01</p> <p>② vertex = 01</p> <p>③ construction = 0 02 + dimension</p> <p>④ curve 02</p>

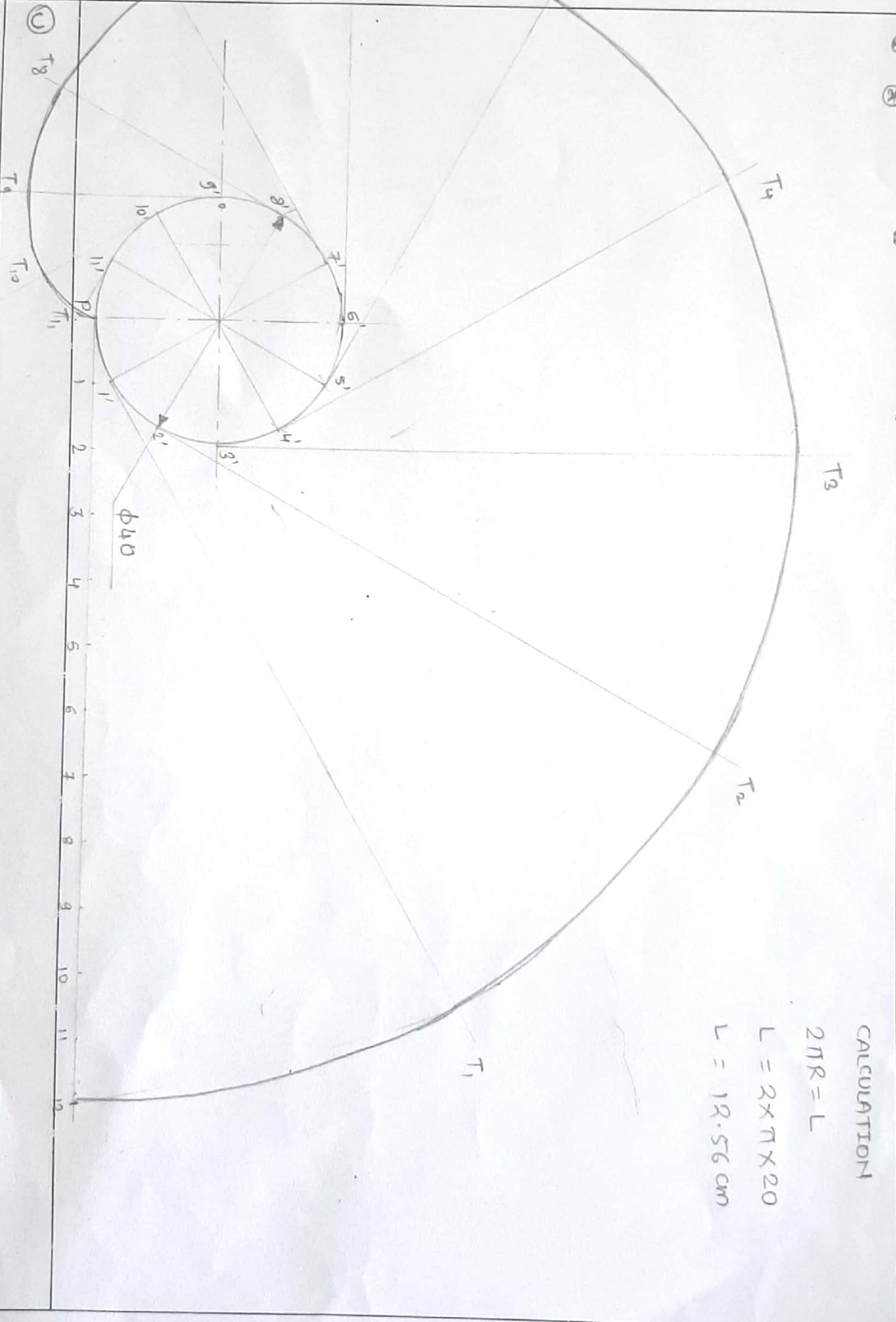
⑦ marks

*Handwritten marks and signatures in red ink.*

**GOVERNMENT POLYTECHNIC PUNE**  
**Model Answers & Marking scheme (ODD-2019)**

Course Name : Engg.Graphics

Course Code : ME2103

Q.No.	Sub-Que.	Model-Answers	Marking scheme
①	①	 <p style="text-align: center;">Model-Answers</p> <p style="text-align: center;">φ40</p> <p style="text-align: center;">T<sub>1</sub> T<sub>2</sub> T<sub>3</sub> T<sub>4</sub> T<sub>5</sub> T<sub>6</sub> T<sub>7</sub> T<sub>8</sub> T<sub>9</sub> T<sub>10</sub> T<sub>11</sub></p> <p style="text-align: center;">1 2 3 4 5 6 7 8 9 10 11</p> <p style="text-align: center;">CALCULATION</p> <p style="text-align: center;"><math>2\pi R = L</math></p> <p style="text-align: center;"><math>L = 2 \times \pi \times 20</math></p> <p style="text-align: center;"><math>L = 12.56 \text{ cm}</math></p>	<p>① Circle = 01</p> <p>② Dividing circle in equal parts and tangent = 01</p> <p>③ Calculation = 01 marks</p> <p>④ Point locating = 02</p> <p>⑤ Curve = 01</p>

CA ~~Print~~

**GOVERNMENT POLYTECHNIC PUNE**  
**Model Answers & Marking scheme (ODD-2019)**

Course Name : Engg.Graphics

Course Code : ME2103

Q.No.	Sub-Que.	Model Answers	Marking scheme
2	a		<p>F.V                  (03)                  Dimension                  (01)</p> <p>T.V                  (03)                  Dimension                  (01)</p>

SCALE:- 1:2

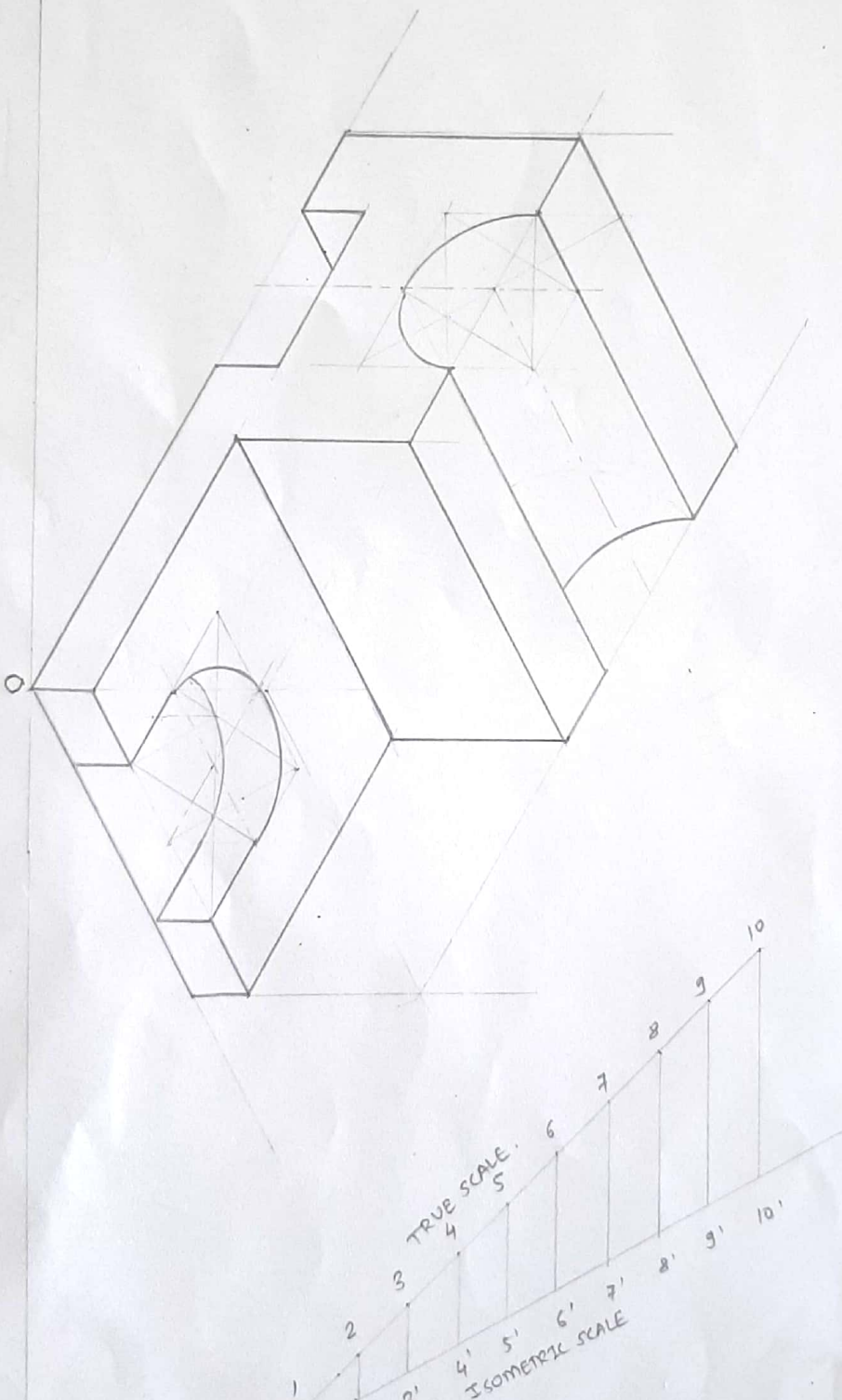
*Handwritten marks/signatures in red ink.*




**GOVERNMENT POLYTECHNIC PUNE**  
**Model Answers & Marking scheme (ODD-2019)**

Course Name : Engg.Graphics

Course Code : ME2103

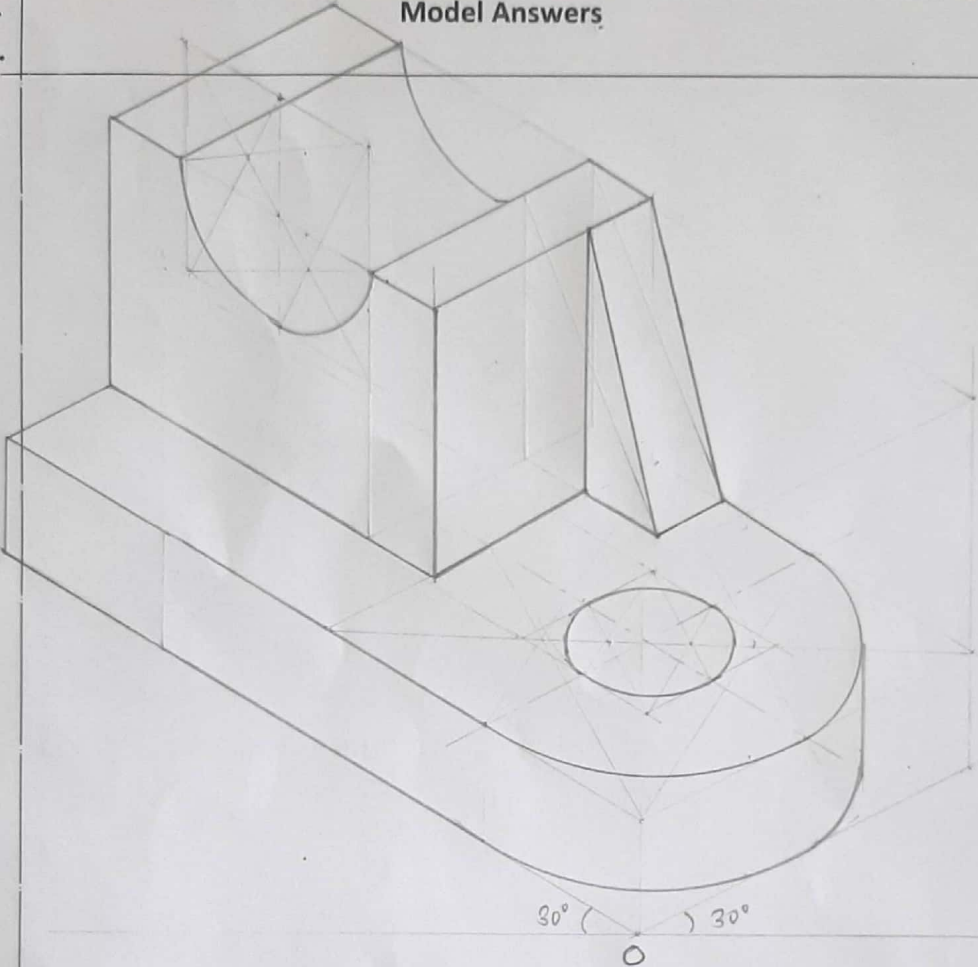
Q.No.	Sub-Que.	Model Answers	Marking scheme
4	a		<p>Box                  (02) marks                  Object without circle.                  (06)</p> <p>Object with circle.                  (04)</p> <p>Need of clean Diagram                  (04)</p> <p>Scale                  (02) m</p>

OK 

**GOVERNMENT POLYTECHNIC PUNE**  
**Model Answers & Marking scheme (ODD-2019)**

Course Name : Engg. Graphics

Course Code : ME2103

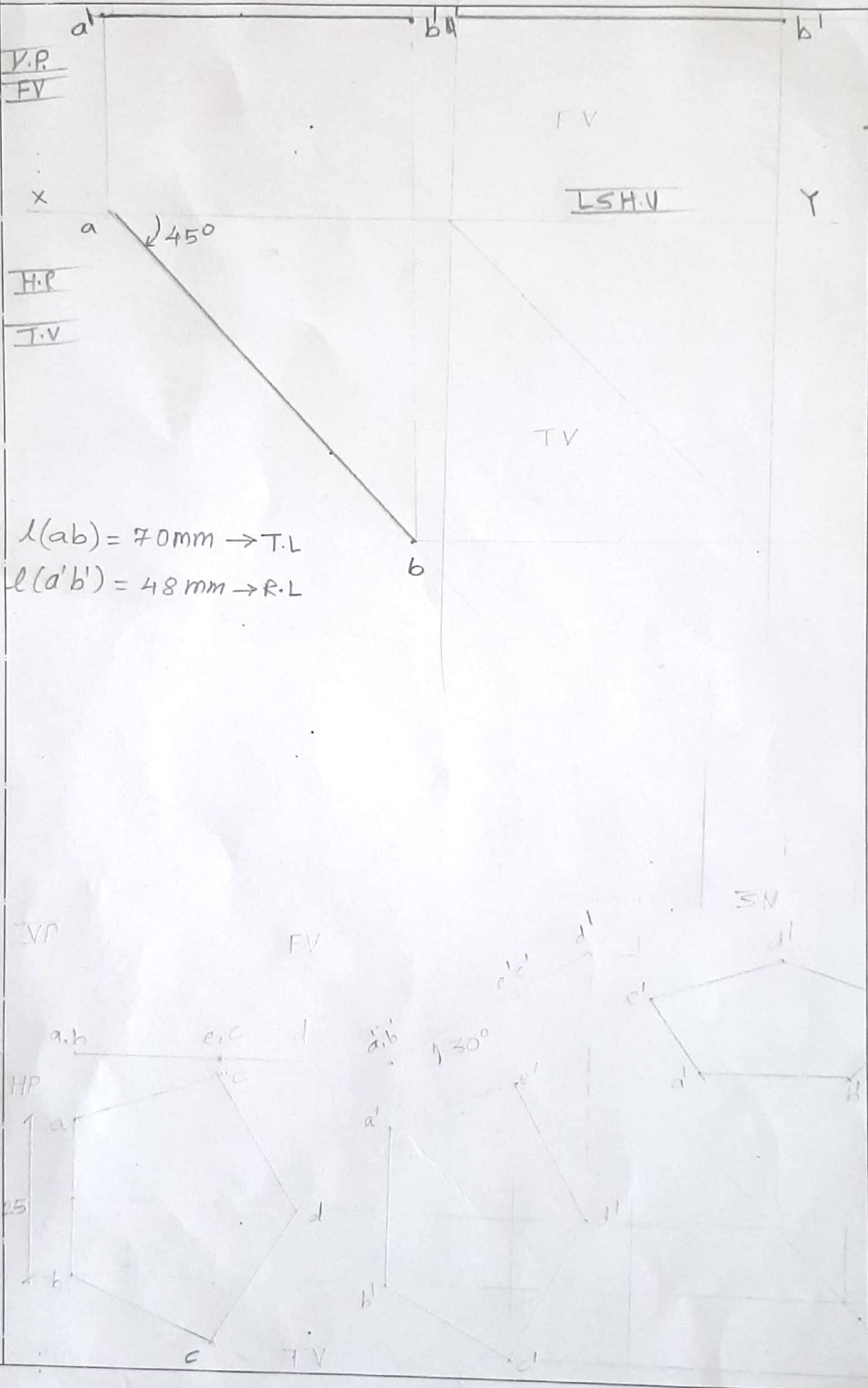
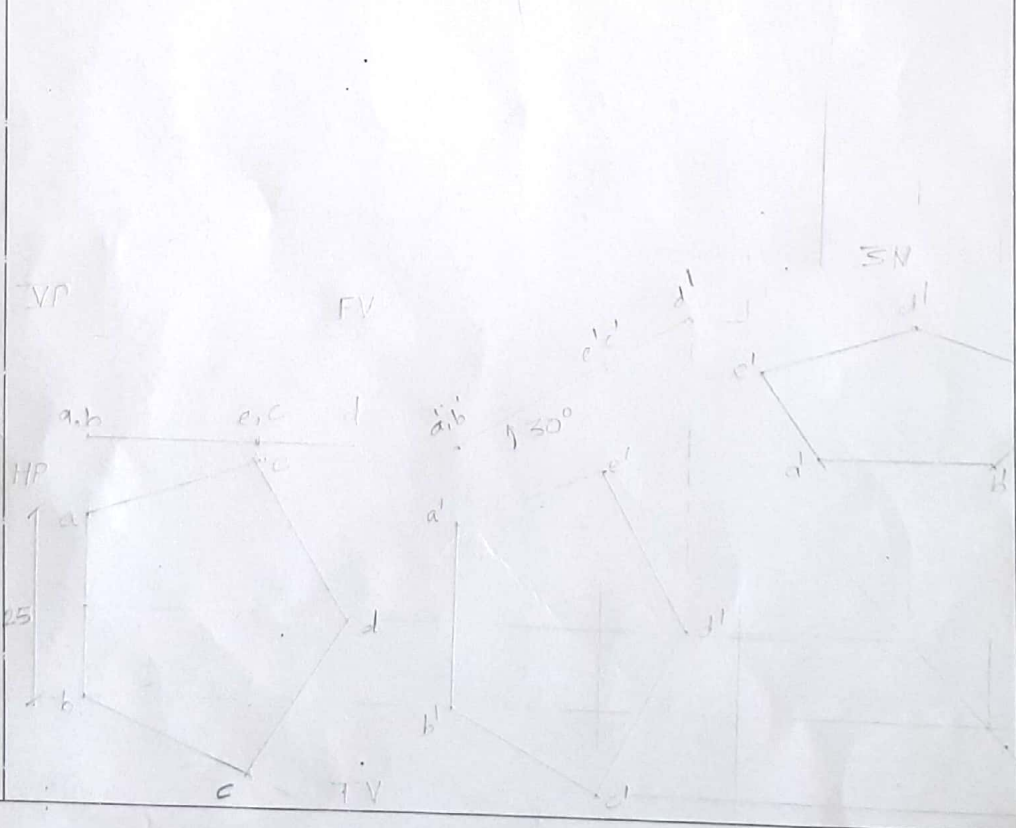
Q.No.	Sub-Que.	Model Answers	Marking scheme
4	b		<p>Obj. Box                  (02) M</p> <p>Object without                  circle                  (06)</p> <p>Object with                  circle.                  (06)</p> <p> neat &amp;                  clean Draw                  (02)</p> <p>+ dimensions.</p>

CA  
 (Signature)

**GOVERNMENT POLYTECHNIC PUNE**  
**Model Answers & Marking scheme (ODD-2019)**

Course Name : Engg. Graphics

Course Code : ME2103

Q.No.	Sub-Que.	Model Answers	Marking scheme
5	a	 <p> <math>l(ab) = 70\text{mm} \rightarrow \text{T.L}</math>  <math>l(d'b') = 48\text{mm} \rightarrow \text{R.L}</math> </p>	<p><u>2M</u>            Front view &amp;            Top view            each            4 Marks            + dimensions.</p>
	b.		<p><u>2M</u>            Front view            Top view            each            4 Marks</p>

*Handwritten red scribbles/signatures.*

**GOVERNMENT POLYTECHNIC PUNE**  
**Model Answers & Marking scheme (ODD-2019)**

Course Name : Engg.Graphics

Course Code : ME2103

Q.No.	Sub-Que.	Model Answers	Marking scheme
5.	b	<p>The drawing consists of three views of a regular pentagon:</p> <ul style="list-style-type: none"> <li><b>Top View (TV):</b> A regular pentagon with vertices labeled <math>a, b, c, d, e</math>. The top edge <math>ab</math> is horizontal and has a dimension of 25. The vertices are arranged such that <math>a</math> is at the top, <math>b</math> is to the right, <math>c</math> is at the bottom, <math>d</math> is to the left, and <math>e</math> is at the top-left.</li> <li><b>Front View (FV):</b> A pentagon with vertices labeled <math>a', b', c', d', e'</math>. The top edge <math>a'b'</math> is horizontal. The angle between the top edge <math>a'b'</math> and the edge <math>b'c'</math> is marked as <math>30^\circ</math>. The vertices are arranged such that <math>a'</math> is at the top, <math>b'</math> is to the right, <math>c'</math> is at the bottom, <math>d'</math> is to the left, and <math>e'</math> is at the top-left.</li> <li><b>Right Side View (RSHV):</b> A pentagon with vertices labeled <math>a'', b'', c'', d'', e''</math>. The top edge <math>a''b''</math> is horizontal. The vertices are arranged such that <math>a''</math> is at the top, <math>b''</math> is to the right, <math>c''</math> is at the bottom, <math>d''</math> is to the left, and <math>e''</math> is at the top-left.</li> </ul> <p>Reference lines are shown: <math>X-Y</math> (horizontal), <math>X-Z</math> (vertical), and <math>Y-Z</math> (diagonal).</p>	<p>Front &amp; Top view            4 Marks each            + dimensions</p>

*Handwritten marks in red ink, possibly initials or a signature.*



**GOVERNMENT POLYTECHNIC PUNE**  
**Model Answers & Marking scheme (ODD-2019)**

Course Name : Engg.Graphics

Course Code : ME2103

Q.No.	Sub-Que.	Model Answers	Marking scheme
Q.5	C	<p style="text-align: center;">I.V.</p> <p style="text-align: center;">F.V.</p> <p style="text-align: center;">HP</p> <p style="text-align: center;">VP</p> <p style="text-align: center;">--- XY</p>	<p style="text-align: center;"><u>8M</u></p> <p>Front          &amp; Top view          each          4 marks</p>

(Handwritten marks)

GOVERNMENT POLYTECHNIC PUNE  
 Model Answers & Marking scheme (ODD-2019)

Course Name : Engg. Graphics

Course Code : ME2103

Q.No.	Sub-Que.	Model Answers	Marking scheme
6.	a)		<p><u>8M</u>                      Front &amp;                      Top view                      each                      4 Marks</p>

**GOVERNMENT POLYTECHNIC PUNE**  
**Model Answers & Marking scheme (ODD-2019)**

Course Name : Engg. Graphics

Course Code : ME2103

Q.No.	Sub-Que.	Model Answers	Marking scheme
6.	a]	<p>The drawing shows the projections of a square pyramid. The top view is a square with side length 50, and the front view is a triangle with a base of 60. The drawing includes the horizontal plane (HP) and vertical plane (VP) lines, and shows the construction of the true shape and size of the pyramid's surface.</p>	<p>Front view for 4 Mark                      Top view for 4 Mark</p>

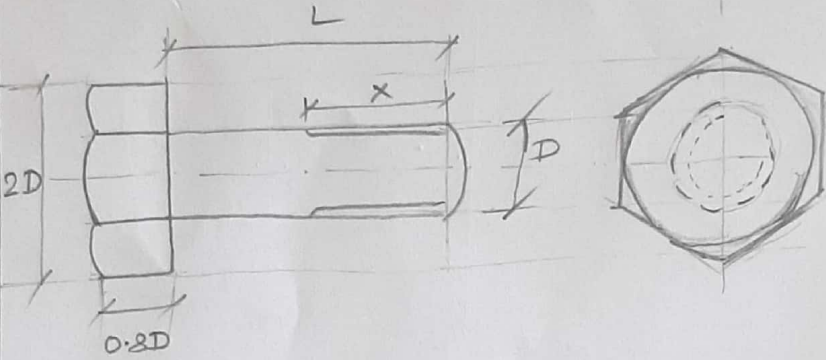
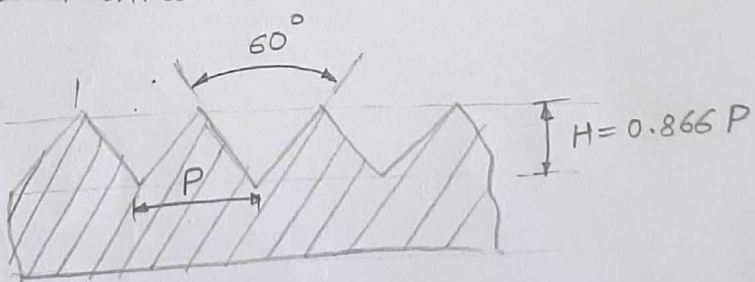
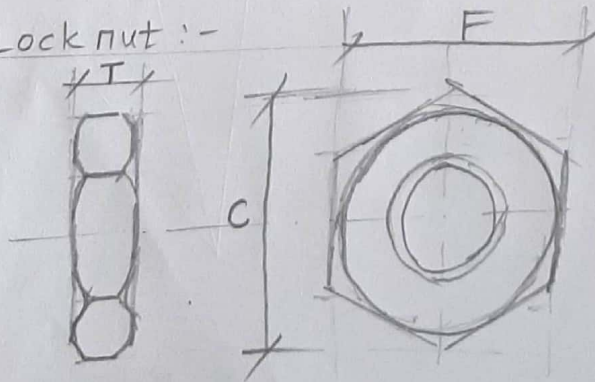
GA

~~12/2/21~~

**GOVERNMENT POLYTECHNIC PUNE**  
**Model Answers & Marking scheme (ODD-2019)**

Course Name : Engg.Graphics

Course Code : ME2103

Q.No.	Sub-Que.	Model Answers	Marking scheme
6.	b	<p>i] Hexagonal Headed bolt :-</p>  <p>ii] Profile of V-thread :-</p>  <p>iii] Lock nut :-</p> 	<p><u>4M</u>            sketch            3 Marks            &amp;            dimensions            1 Marks.</p> <p><u>4M</u>            same            as above</p> <p><u>4M</u>            same as            above</p>