

Total No. of Questions :8]

SEAT No. :

**P4023**

[Total No. of Pages :4

**[5351] - 103**

**F.E. Engineering**

**ENGINEERING GRAPHICS - I**

**(2015 Pattern) (Semester - I)**

*Time : 2 Hours]*

*[Max. Marks :50*

*Instructions to the candidates:*

- 1) *Retain all construction lines.*
- 2) *Figure to the right indicates full marks.*
- 3) *Assume suitable data wherever necessary.*
- 4) *Use of electronic pocket calculator is allowed (non-programmable).*

**Q1)** A line AB resting in the first quadrant has its end A is 30 mm from the H.P. and in the V.P. End B is at 30 mm in-front of V.P. Draw projections of the line if, its elevation makes  $39^\circ$  inclination to H.P. plan makes  $30^\circ$  inclination to V.P. Draw its projections and locate the traces. **[12]**

OR

**Q2)** A hexagonal plate ABCDEF of 35 mm size is resting on its corner F on the H.P. Draw projections of the plate when the plate surface makes an angle of  $35^\circ$  to H.P. and plan of the FC makes  $40^\circ$  inclination to V.P. **[12]**

**Q3)** A hexagonal pyramid of base 35 mm and height 85 mm is resting on one of its base corners. The slant edge passing through resting corner makes  $35^\circ$  inclination to H.P. Draw projections of the pyramid when the plan of axis makes  $40^\circ$  inclination to V.P. **[13]**

OR

**Q4) a)** Draw a conic section when eccentricity ratio is one. The distance between fixed line and focus is 50 mm; Name the curve and give all necessary dimensions. **[7]**

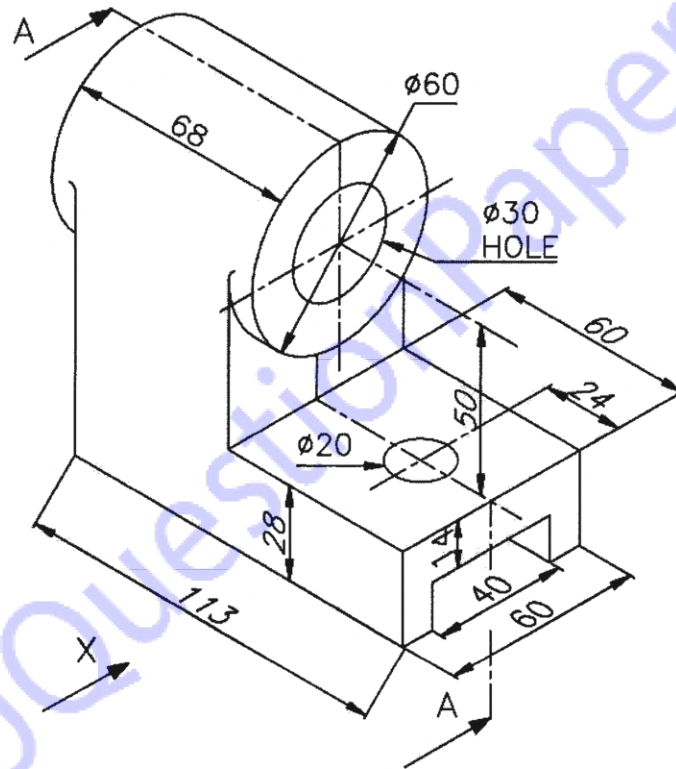
**P.T.O.**

- b) Draw the development of lateral surface of hexagonal prism of base side 25 mm and axis height 65 mm. [6]

**Q5)** For the pictorial view shown in the Figure draw, [13]

- Sectional Front view in the direction X (along section AA)
- Top view
- Right hand side view

Place all necessary dimensions. Use first angle method of projections.

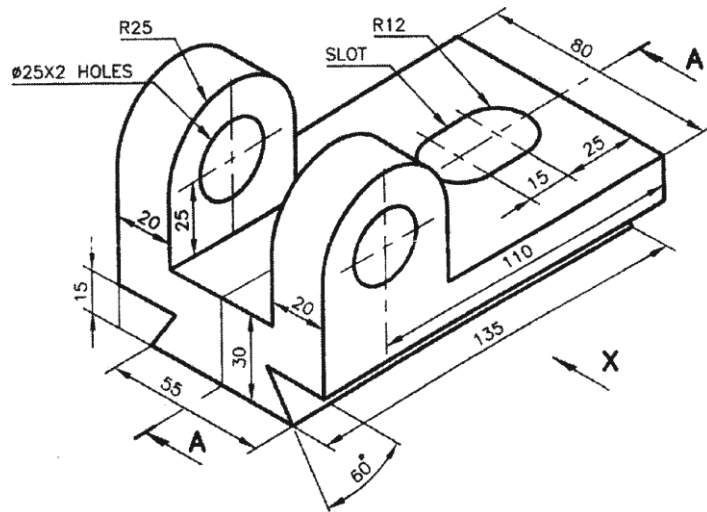


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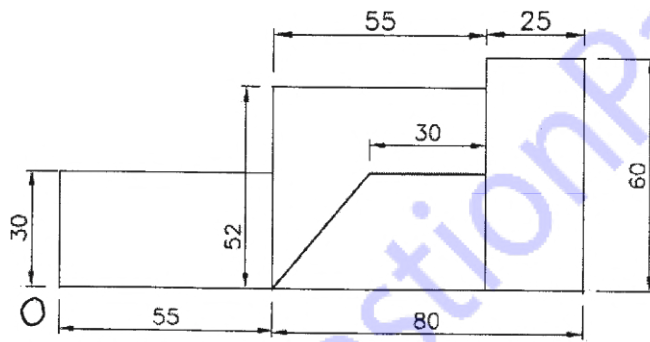
**Q6)** For the pictorial view shown in the Figure draw, [13]

- Sectional front view along the section AA
- Top view
- Left hand side view

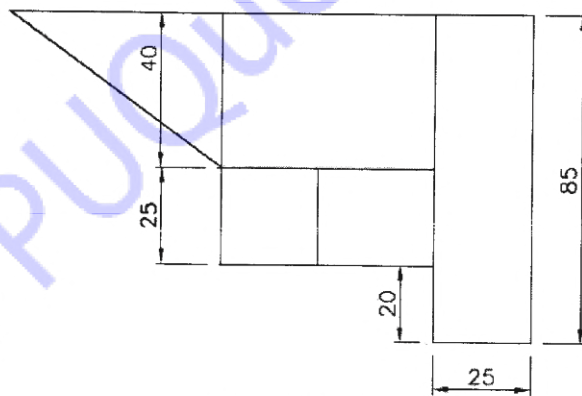
Place all necessary dimensions. Use first angle method of projections.



Q7) Figure shows front view and top view of an object. Draw Isometric view and show overall dimensions. [12]



FRONT VIEW



TOP VIEW

OR

Q8) Figure shows front view and top view of an object. Draw Isometric view and show overall dimensions. [12]

