

[5868]-116

F.Y. Engineering (Semester - I & II)
ENGINEERING GRAPHICS
(2019 Pattern) (102012)

*Time : 2½ Hours]**[Max. Marks : 50]**Instructions to the candidates:*

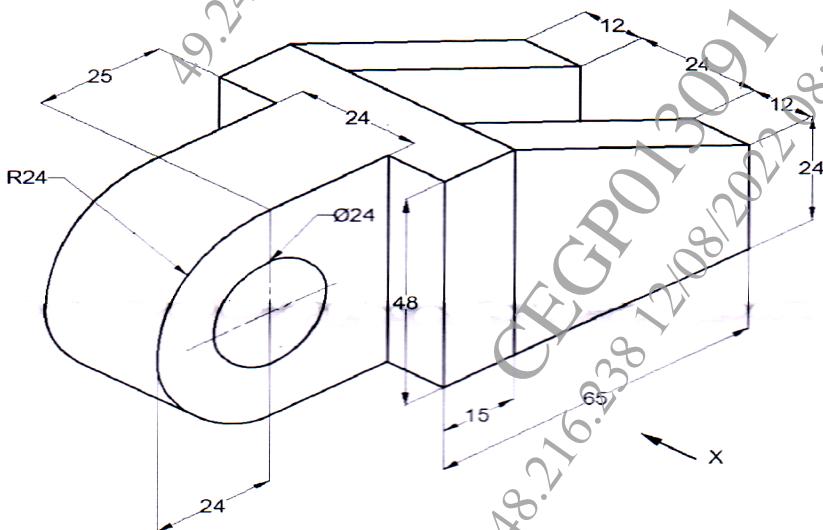
- 1) Solve Q1 or Q2, Q3 or Q4, Q5 or Q6 and Q7 or Q8.
- 2) Assume suitable data, if necessary.
- 3) Retail all the construction lines.

Q1) Draw a curve traced out by a moving point in such a way that its distance from focus is 21 mm and eccentricity is $\frac{3}{5}$. [8]

OR

Q2) A straight rod AB of 60 mm length revolves one complete revolution with a uniform motion in a clockwise direction when hinged about A. During this period a point P moves along the rod from B to A and reaches back to B with a uniform linear motion. Draw the locus of point P. Name the Curve. [8]

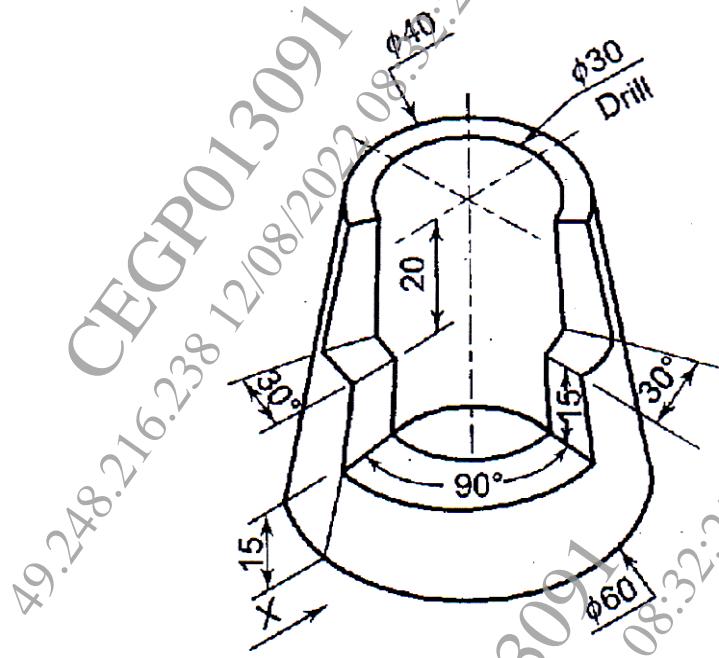
Q3) Figure shows a pictorial view of an object. By using first angle method of projection draw, Sectional Front View along symmetry looking in the direction of X. Top View and LHSV. Give dimensions in all views. [16]



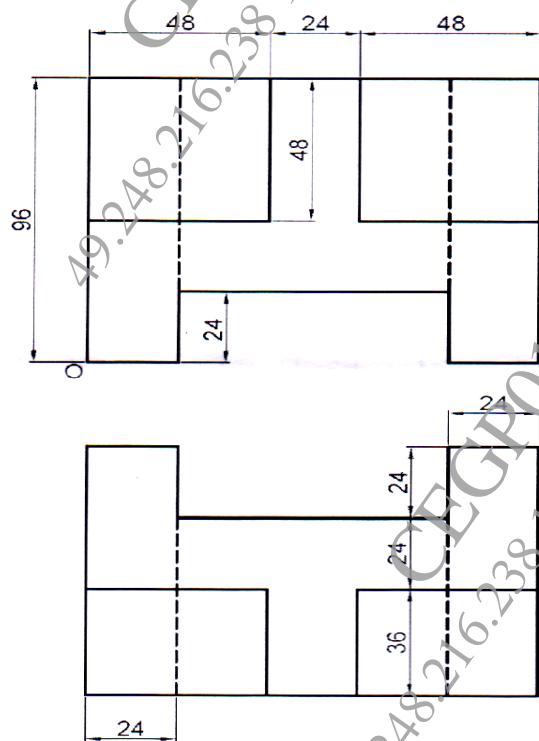
P.T.O.

OR

Q4) Figure shows a pictorial view of an object. By using first angle method of projection draw, Front View in the direction of X, Top View and RHSV. Give dimensions in all views. **[16]**

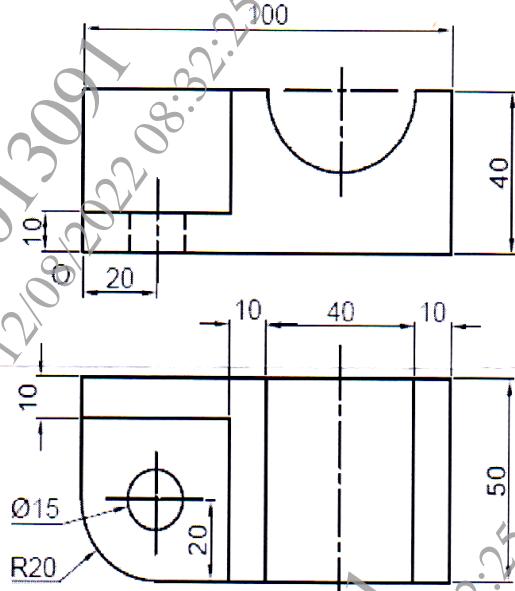


Q5) Figure shows orthographic views of an object by first angle method of projection. Draw its isometric view and give all the dimensions. **[16]**



OR

Q6) Figure show orthographic views of an object by first angle method of projection. Draw its isometric view and give all the dimensions. [16]



Q7) A square pyramid edge of the base 40 mm axis length 70 mm stands with its base on HP with two sides of the base parallel to VP. It is cut by an AIP inclined at 60° to the HP and passing through a point on the axis 40 mm from base. Draw the development of surfaces of pyramid. [10]

OR

Q8) Figure shows the FV of a square prism, base side 30 mm and axis 60 mm long, resting on its base on HP such that each of its base edges are equally inclined to VP. The prism is cut by two cutting planes C1-P1 and C2-P2 as shown in figure. Draw the development of remaining surface of square Prism. [10]

