

Total No. of Questions : 8]

SEAT No. :

**P3925**

[6001]-4010

[Total No. of Pages : 3

**F.E.**

**ENGINEERING GRAPHICS**

**(2019 Pattern) (Semester - I/II) (102012)**

*Time : 2½ Hours]*

*[Max. Marks : 50*

*Instructions to the candidates:*

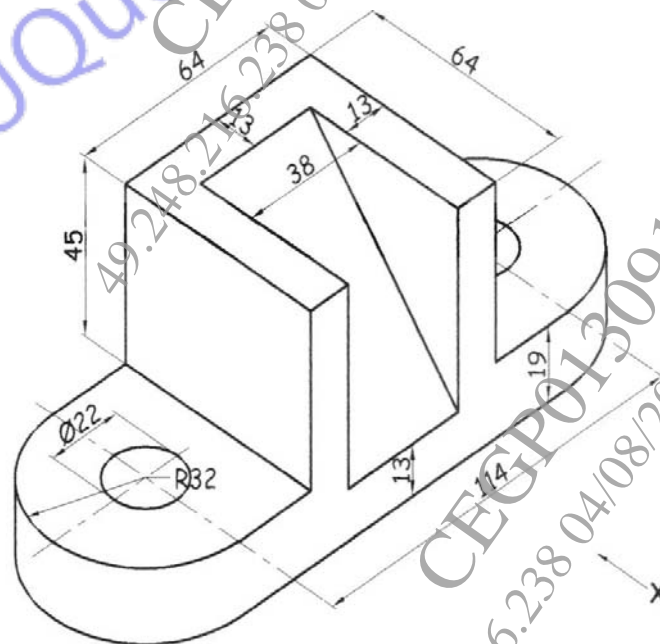
- 1) Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.
- 2) Assume suitable data, if necessary.
- 3) Retain all the construction lines.

**Q1)** Draw an ellipse by rectangular method if the major axis and minor axis are 160 mm and 100 mm respectively. **[8]**

OR

**Q2)** Draw a cycloid of a rolling circle of diameter 40 mm. Assume the point 'P' is away from the base. **[8]**

**Q3)** Figures 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 Left-Hand Side View. Give dimensions in all views. **[16]**

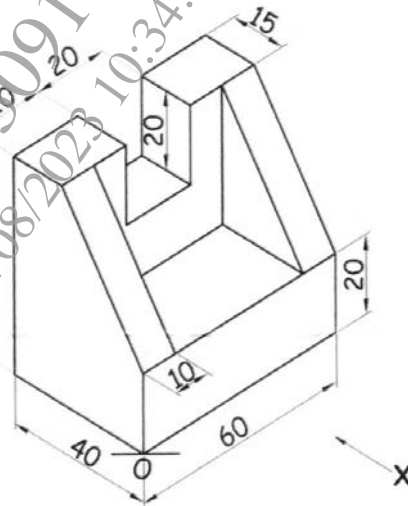


OR

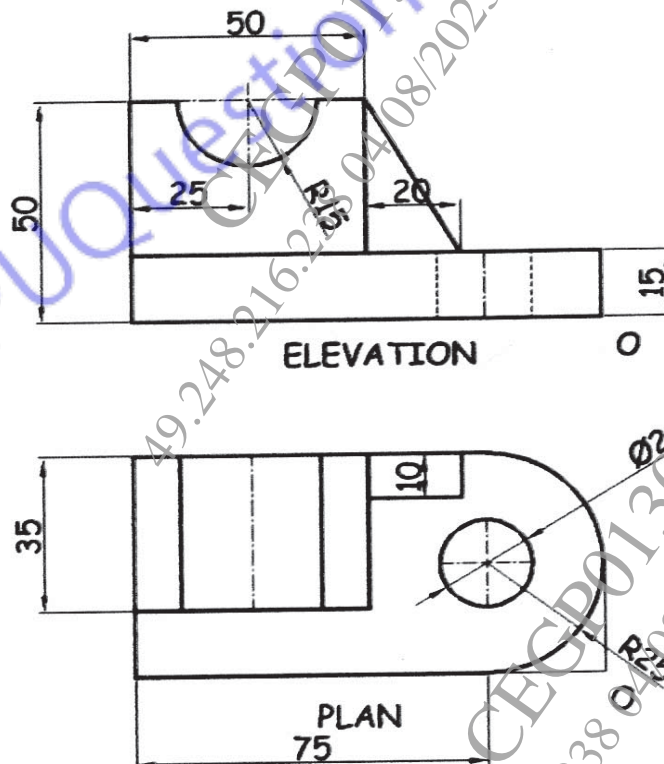
**P.T.O.**

**Q4)** Figure shows the pictorial view of an object. By first angle method of projection draw: [16]

- Front View in the X direction
- Top View
- Sectional Left-Hand Side View along symmetry of the object.

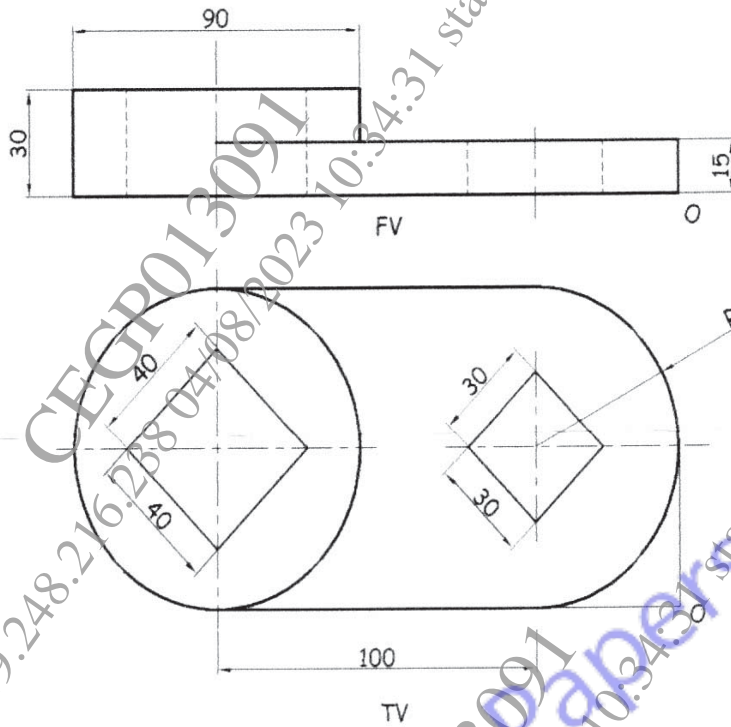


**Q5)** Figure show orthographic views of an object by first angle method of projection. Draw its isometric view and give all the dimensions. [16]



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 hexagonal pyramid of base 30 mm and axis and axis height 75 mm is resting on H.P. with side of the base parallel to V.P. It is cut by a section plane, perpendicular to V.P. and inclined at  $45^\circ$  to H.P. and bisecting axis of the pyramid. Draw the development of lateral surfaces of the pyramid. [10]

OR

**Q8)** A pentagonal prism side of base 30 mm and axis 60 mm long is kept on HP in such a way that one of its base edges is parallel to the VP and near to the observer. A cutting plane bisects its axis at  $45^\circ$ . Draw the development of lateral surfaces the pentagonal prism. [10]

