

**Total No. of Questions : 8]**

**SEAT No. :**

**PD-4033**

[Total No. of Pages : 3]

[6401]-1910

**F.E.**

# ENGINEERING GRAPHICS

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

**Time : 2½ Hours]**

[Max. Marks : 50]

### ***Instructions to the candidates:***

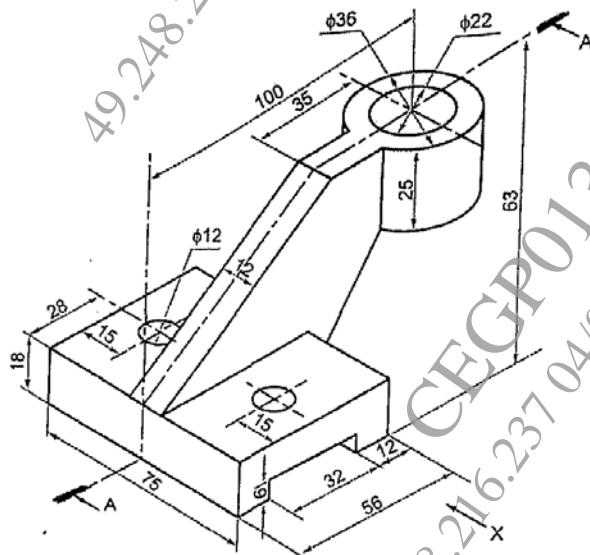
- 1) *Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.*
- 2) *Assume suitable data, if necessary.*
- 3) *Retain all the construction lines.*

**Q1)** Draw an ellipse by rectangular method if the major axis and minor axis are 100mm and 70mm respectively. [8]

OR

**Q2)** Draw Involute of a circle having 50 mm diameter and String length is equal to the circumference of circle. [8]

**Q3)** Figures shows a pictorial view of an object. By using first angle method of projection, draw sectional Front View in the direction of X, Top View and Left-Hand Side View. Give dimensions in all views. [16]

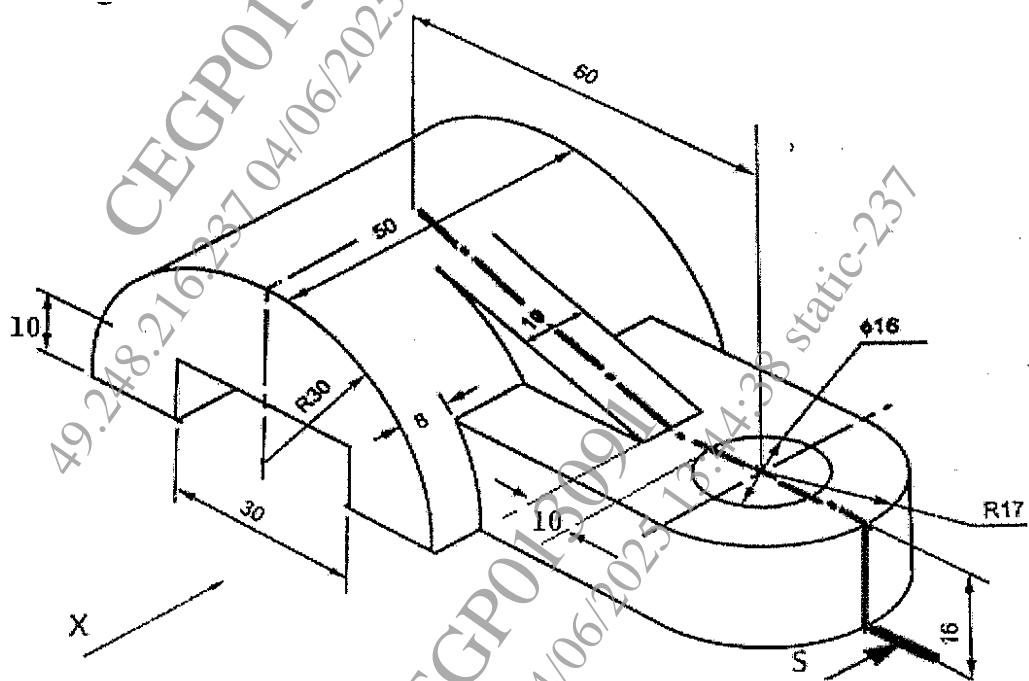


P.T.O.

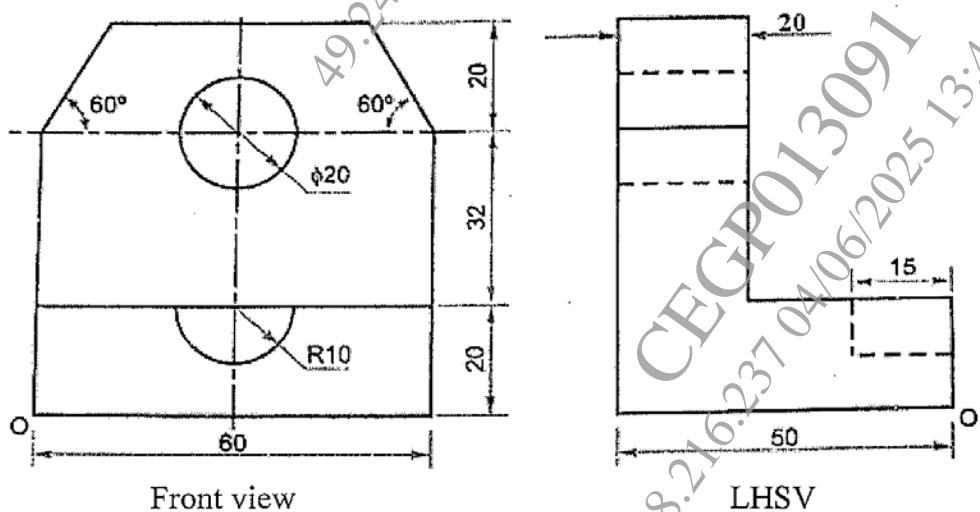
OR

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

- a) Sectional Front View in the X direction shown by S
- b) Top View
- c) Right-Hand Side View

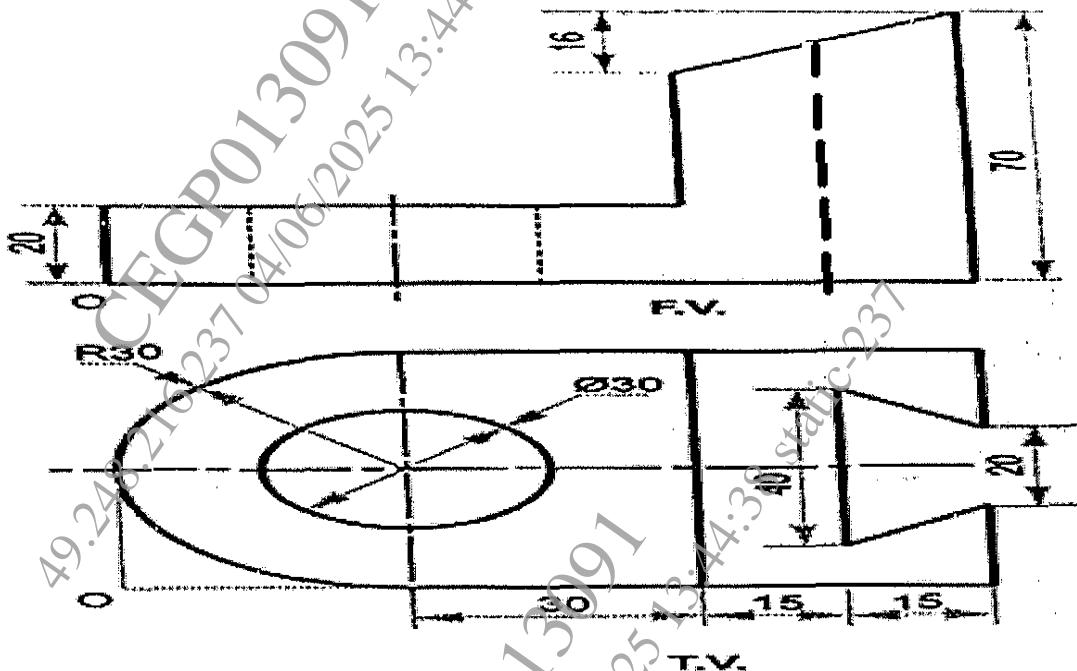


**Q5)** Figure show orthographic views of an object by first angle method of projection. Draw its isometric view and give all the dimensions. [16]



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)** Draw the development of surface of the cone having base diameter 50 mm and axis height 70 mm. If it is cut by cutting plane which bisects the axis of the cone and inclined at  $45^\circ$  with HP. [10]

OR

**Q8)** Draw the development of lateral surface of pentagonal prism of base side 35 mm & axis height 80 mm, has its one side of base is parallel to VP and corner is nearer to observer. It is cut by a cutting plane which is inclined at  $30^\circ$  to the HP and bisecting the axis of cylinder. [10]

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