[6260]-10

F.E.

ENGINEERING GRAPHICS - I

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

Time : 2½ Hours]   *[Max. Marks : 50*

Instructions to the candidate:

1) *Attempt Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.*
2) *Figures to the right indicate full marks.*
3) *State clearly the assumptions made, if any.*
4) *Use of non-programmable calculator is allowed.*
5) *Assume suitable data if necessary.*
6) *Retain all the construction lines*

Q1) Draw an ellipse when the distance of focus from directrix is equal to 64 mm and eccentricity is 3/5. **[8]**

OR

**Q2)** Draw an involute of a circle having 50 mm diameter. **[8]**

Q3) Figure shows a pictorial view of an object. By using first angle method of projection draw, front view looking in direction X, top view and side view. Give dimensions in all views. **[16]**


OR
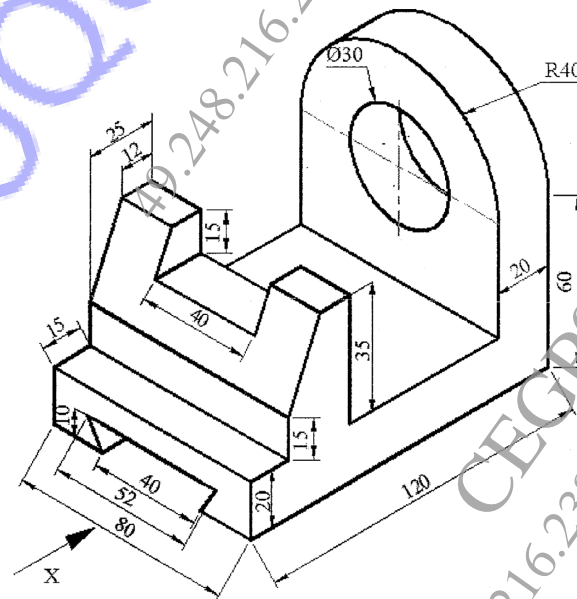
Q4) Figure shows a pictorial view of an object. By using first angle method of projection draw, sectional front view looking in direction X, section along line of symmetry, top view and side view. Give dimensions in all views. **[16]**
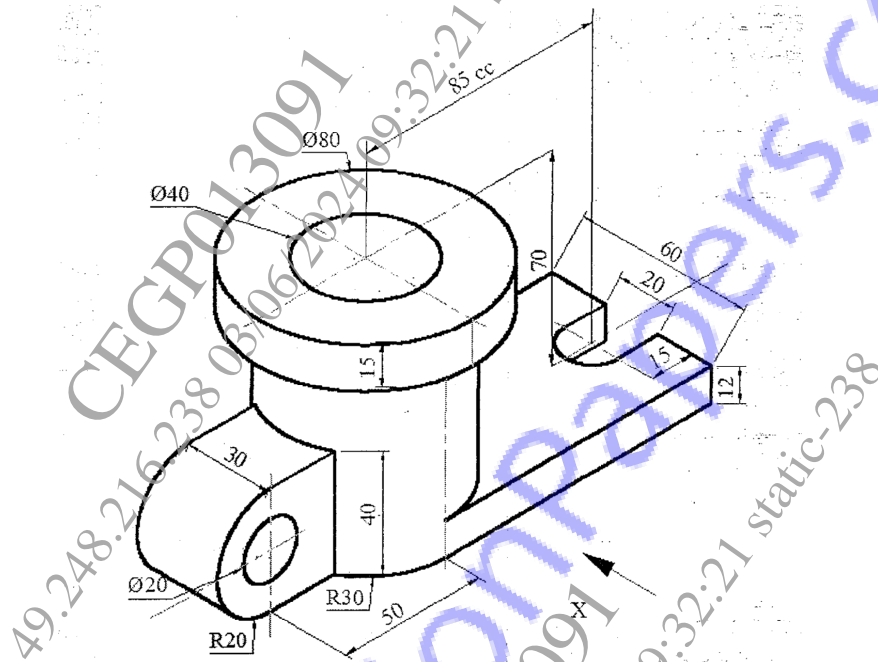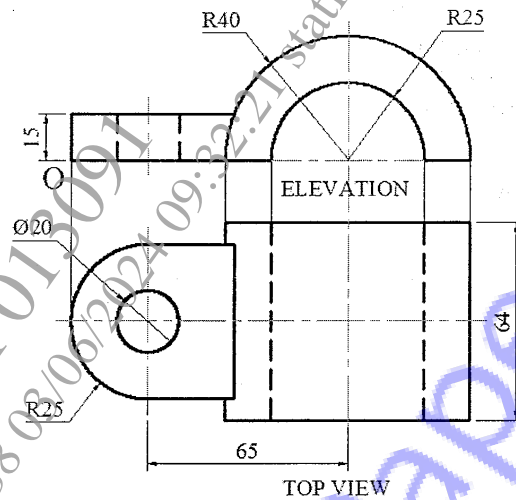

Q5) Figure shows front view and top view of an object. Draw isometric view. Give overall dimensions. **[16]**

ELEVATION

TOP VIEW

OR

Q6) Figure shows front view and top view of an object. Draw isometric view. Give overall dimensions. **[16]**

R40   R25

15

O

ELEVATION

Ø20

64

R25

65
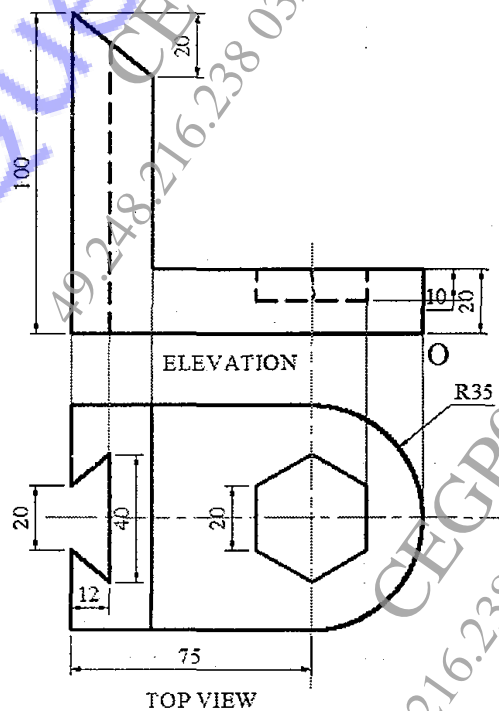
TOP VIEW

Q7) A pentagonal pyramid, side of base edge 30 mm and height 60 mm, stands with its base on HP with an edge of base is parallel to VP and nearer to it. It is cut by a section plane perpendicular to VP, inclined at 45° to HP and passing through a point on axis, 32 mm above the base. Draw development of lower portion of the pyramid. **[10]**

OR

Q8) Draw the development of lower portion of pentagonal prism having side of base 35 mm and axis height 80 mm, rests on HP on its base with an edge of the base parallel to V.P., it is cut by a section plane inclined at 45° to HP and bisecting the axis of the prism. **[10]**

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