

Total No. of Questions : 8]

SEAT No. :

P1961

[Total No. of Pages : 4

F.E. (Semester - I)
ENGINEERING GRAPHICS - I
(2012 Pattern)

Time : 2 Hours]

[Max. Marks : 50

Instructions:

- 1) *Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8*
- 2) *Use only half imperial size drawing sheet as answer book.*
- 3) *Retain all construction lines.*
- 4) *Assume suitable data if necessary.*

Q1) The point M of line MN is in HP while its other end N is 50 mm above HP and 80 mm in front of VP. The line is inclined to VP at an angle of 40° . Draw the projections of a line if its elevation makes 29° with HP. Find true length of line and the inclination made by the line with HP. Also, locate the traces of line. **[12]**

Q2) An isosceles triangle, base 50 mm and altitude 80 mm, is resting in VP on its base. Its surface is inclined to VP so that the corner opposite to resting side is 50 mm in front of VP. Draw the projections if its resting side is inclined to HP at an angle of 45° . Find inclinations made by the plane with HP and VP. **[12]**

Q3) A square prism of base side 40 mm and axis height 80 mm is resting in HP on one of its base side. Then it is tilted so that the face contained by resting side is inclined to HP at 30° . Draw the projections, if its axis is inclined to VP at 40° . **[13]**

Q4) a) Draw a hyperbola by focus directrix method if focus is 50 mm from directrix and eccentricity is $3/2$. **[7]**

b) Draw the development of lateral surface of hexagonal prism of base side 30 mm and axis height 60 mm. **[6]**

P.T.O.

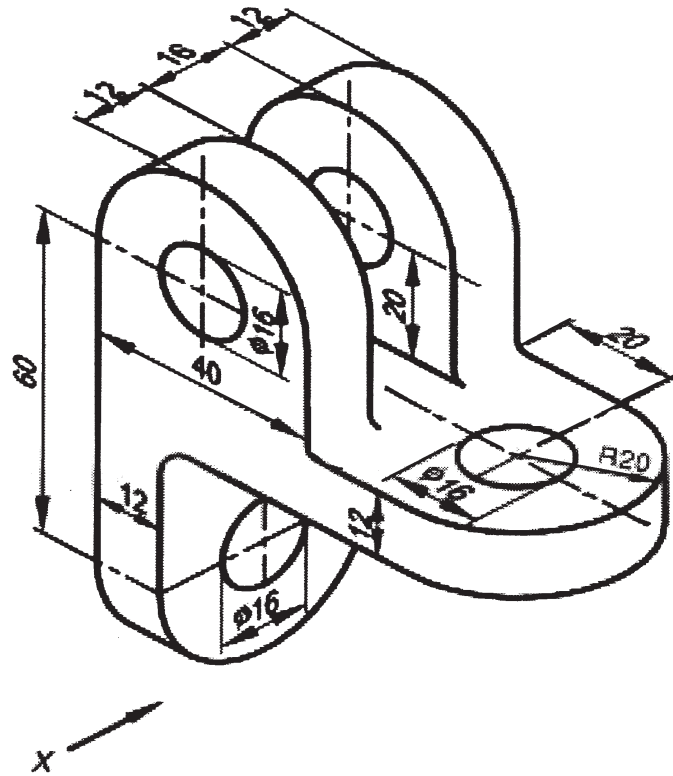


Figure 2

Q7) Figure 3 shows front view and end view of a bracket. Draw isometric view and show overall dimensions. [12]

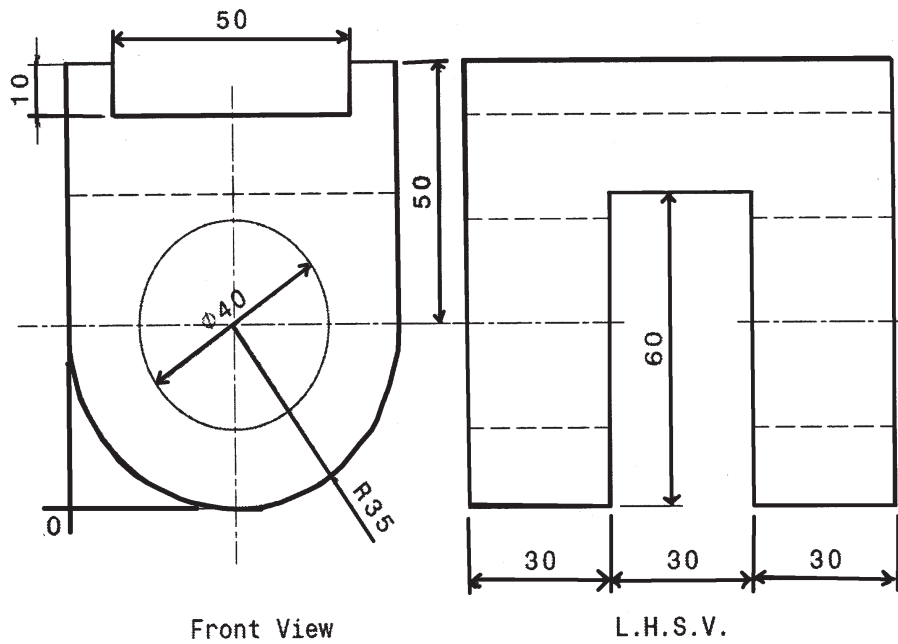


Figure 3

Q8) Figure 4 shows front view and end view of an object. Draw isometric view and show overall dimensions. [12]

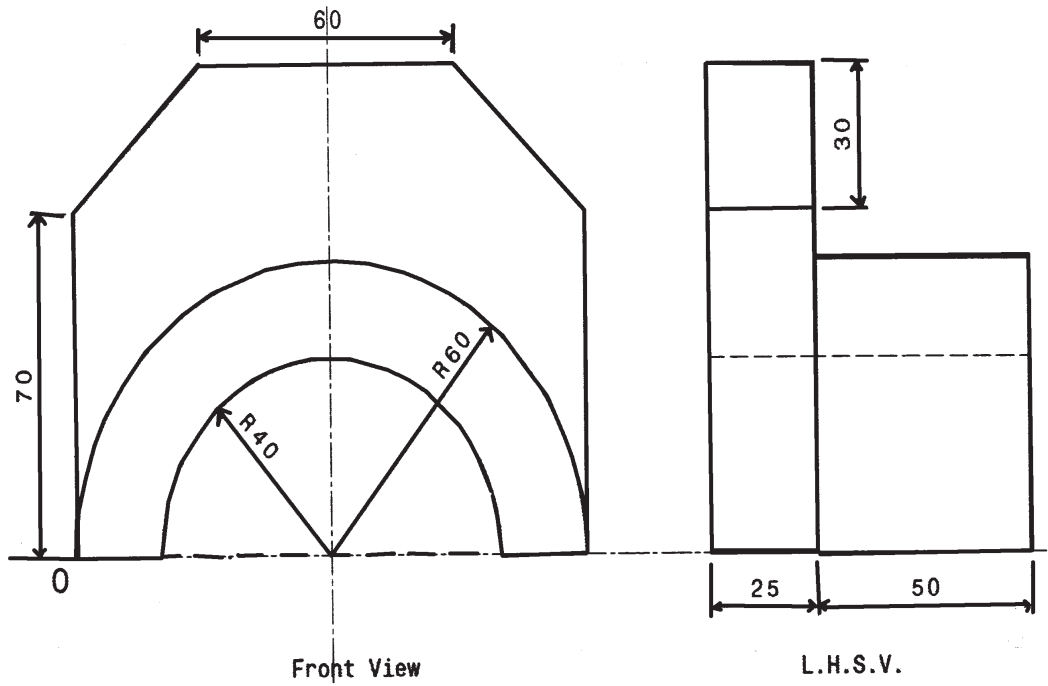


Figure 4

