

SUBJECT : TECHNICAL DRAWING APPLICATIONS
 TIME : 3 HOURS

CLASS : X
 MARKS : 100

Instructions:

- You must attempt three questions from Section A and two questions from Section B.
- Each Section must be answered on separate paper.
- All construction lines must be shown.
- All dimensions are in mm.

SECTION A (48 Marks) (Attempt any 3)

Q.1 A line of 2cm in a drawing represents 5metre. Construct a Diagonal scale to measure upto 40 metre showing meter and decimeter. (16)
 Using the above scale construct a triangle ABC having base BC = 20.8m, AB = 15.3m, AC = 30m. Costruct a parallelogram with one angle = 60° equal in area to the triangle.

Q.2 a) Refer Figure (1). Draw a continuous arc passing through the points A, B, C, D (8)
 And find the length of the arc ABC by geometrical means .
 Measure and record its length.

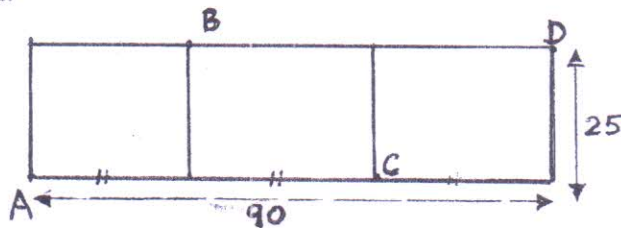


FIGURE [1]

b) Construct a Parabola having Base length = 150mm and Axis height 90mm using OBLONG Method. (8)

Q.3 Refer Figure (2) . Copy the given template (Insert any six dimensions) . (16)

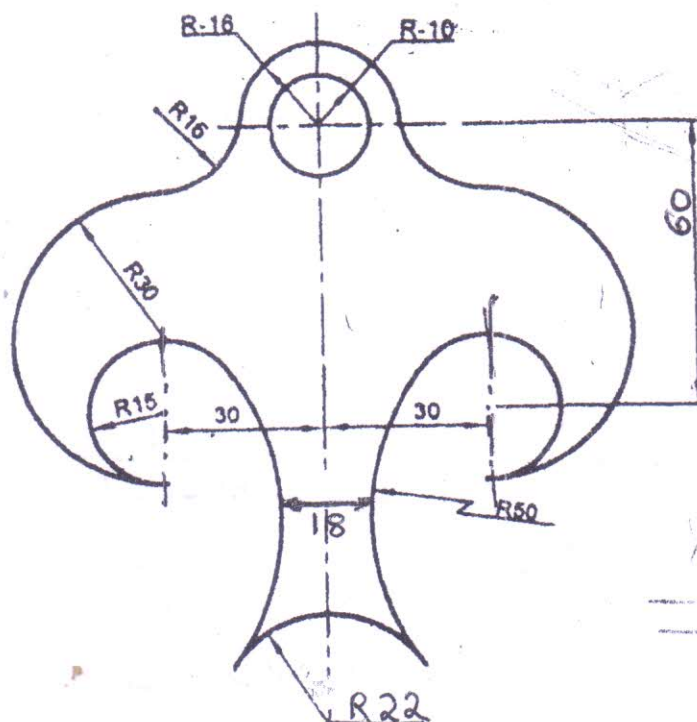


FIGURE [2]

- Q.4 Draw the oblique view of the orthographic projection given in Figure (3) with receding axis at an angle of 45° to the horizontal. Do not insert any dimensions. (10)

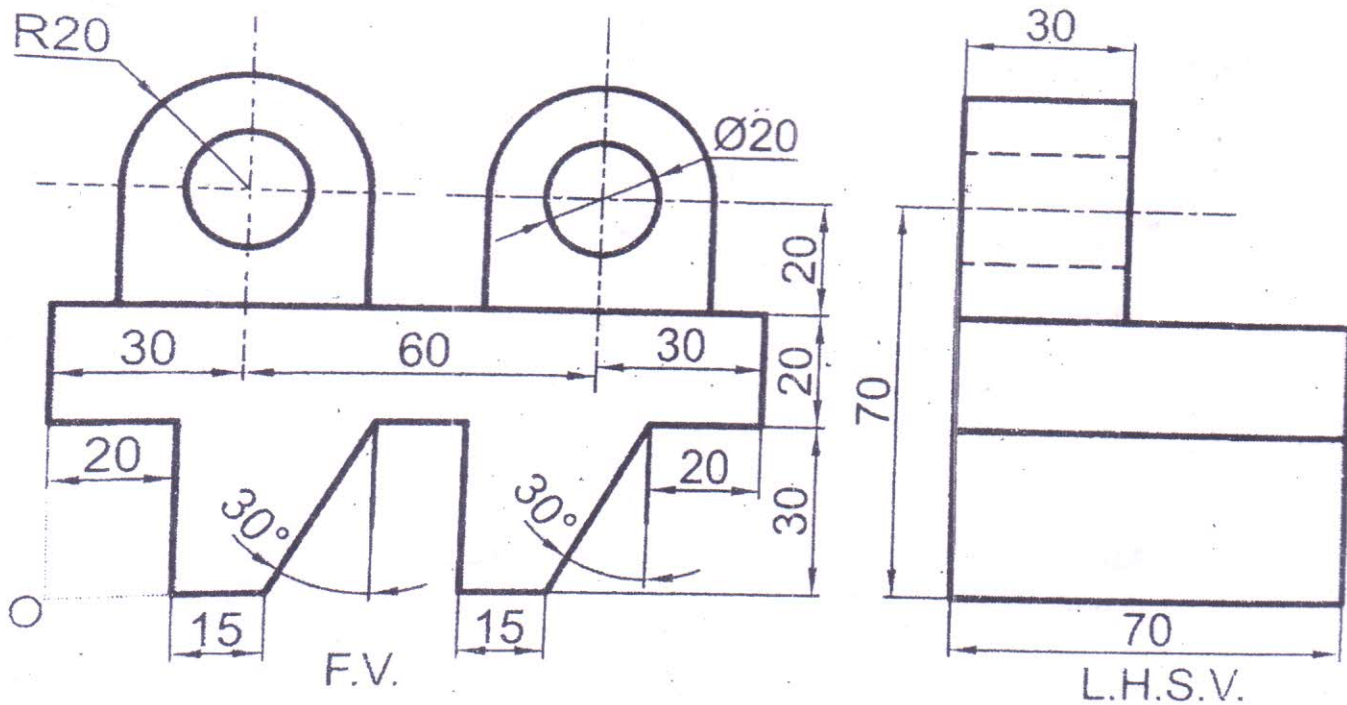


FIGURE [3]

- Q.5 Draw front view, top view and right hand side view of a square prism of side of base 35mm and axis height 75mm resting with its axis inclined at 60° to the G.L. and one side of base is inclined at 30° to the V.P. (USE THIRD ANGLE) (16)

SECTION B (52 Marks)

(Attempt any two questions)

- Q 6 Refer Figure (4). It shows front and side view of an object. Draw the isometric view of the of the object. Use scale 2:1. Insert length, width and height. (26)

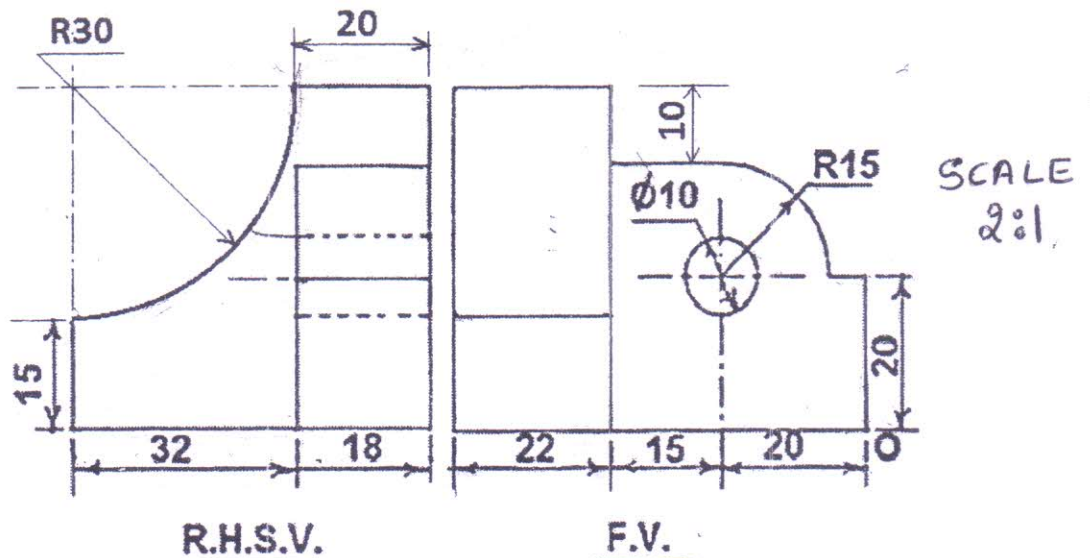


FIGURE [4]

- Q.7 Refer Figure (5). It shows two orthographic views in Third angle method. Draw (26)
- a) Sectional front view along A-A (8)
 - b) Sectional Top View along B-B (8)
 - c) Missing Left hand side view (8)
 - d) Dimensioning + labeling (2)

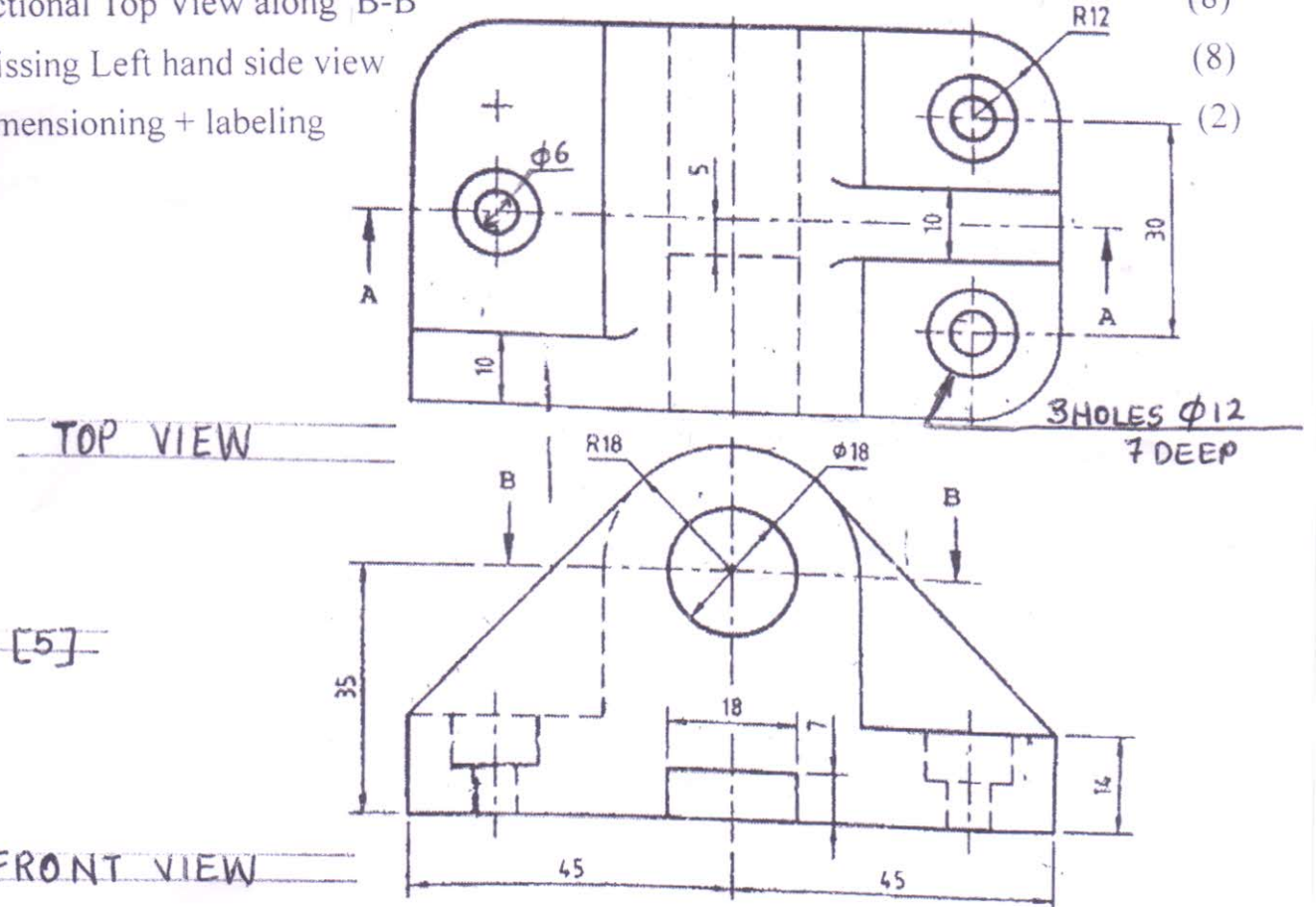


FIGURE [5]

- Q.8. Refer Figure(6). It shows isometric view of a pivot block. Draw (26)
- a) Sectional front view along A-A (8)
 - b) Top View (8)
 - c) Left hand side view (8)
 - d) Dimensioning + labeling (2)

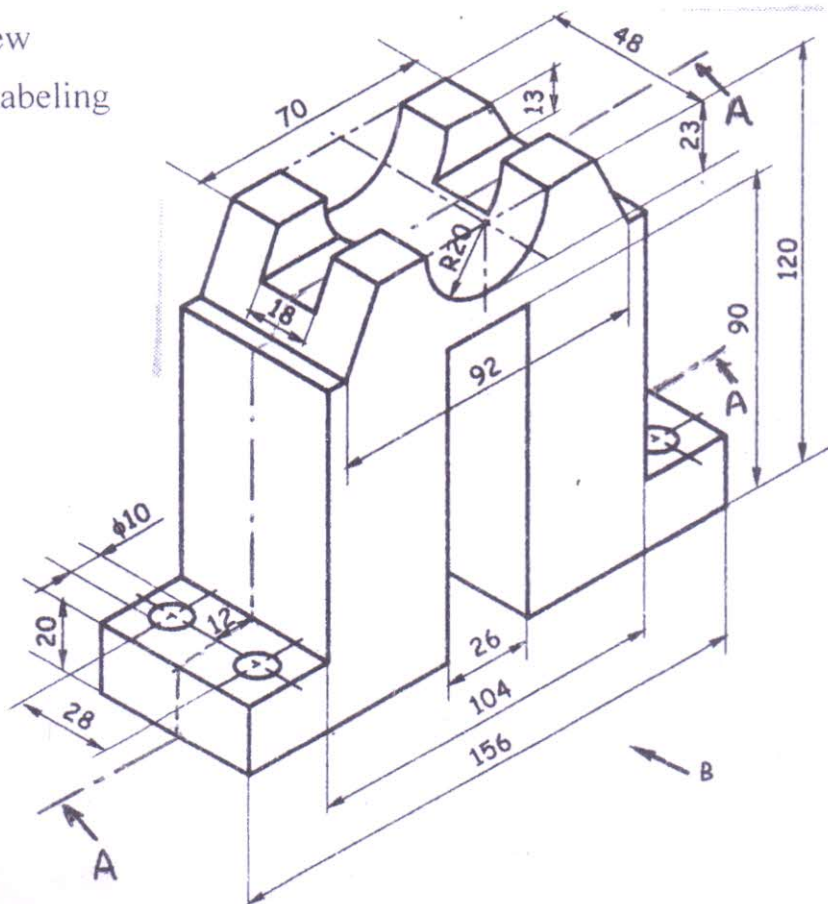


FIGURE [6]