Instructions:

- You must attempt three questions from Section A and two questions from Section B.

- Each Section must be answered on separate sheet.

- All construction lines must be shown.

- All dimensions are in mm.

- The intended marks for questions are given in brackets.

SECTION A (48 Marks)
(Attempt any 3)

Q.1   Refer **Figure (1)**. Copy the given figure . Insert any six dimensions.   (16)
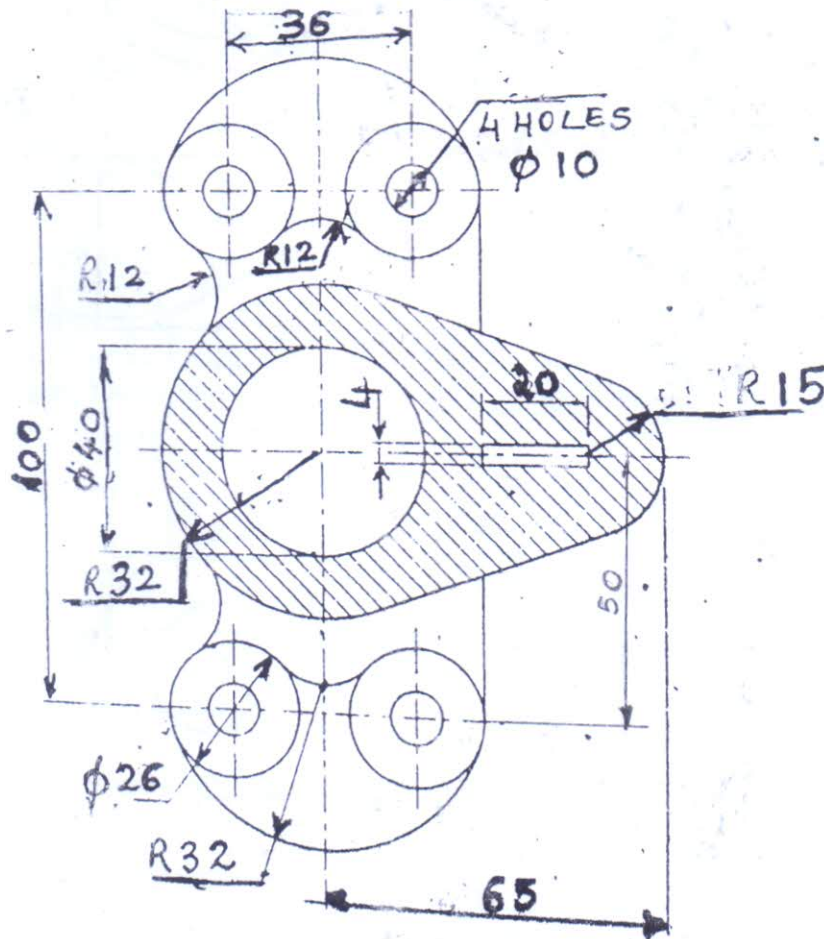

FIGURE 1

Q.2   Construct a Plain Scale long enough to measure length of 5 metre. Given R.F   (16)
           is 1:50. Show the data and working neatly.
           Taking the measurements from the scale constructed , draw a neat scale diagram
           of a regular Pentagon ABCDE of side 2.6 metre using Three circle method.

Q.3a)   Costruct an ELLIPSE by CONCENTRIC CIRCLES METHOD   (10)
        Given Major Axis = 125mm, Minor Axis = 50mm.

   b)   Draw a square of side 60mm . Draw four circles inside the square such that each   (6)
        circle touches two sides of the square and two other circles.

Q.4a)   Construct a PARABOLA using OBLONG METHOD   (10)
        Given Base length = 125mm and Axis height = 65mm

   b)   Construct a Direct Common Tangent to two circles of radii 45mm and 30mm   (6)
        each and distance between their centres 115mm. Measure and record its length.

Q.5   Refer to **Figure 2** given below. It shows F,V, and the T.V. of an object in the   (16)
        THIRD ANGLE METHOD of projection. Draw the OBLIQUE VIEW when the
        Receding Axis is inclined at 45° to the horizontzal.
        (Do not insert any dimensions)
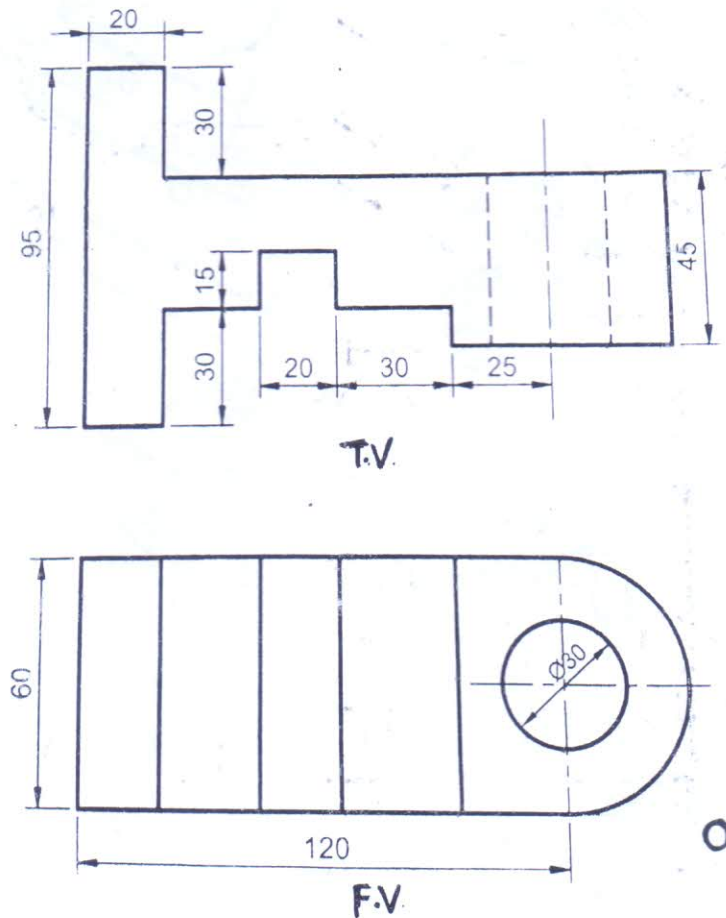
FIGURE 2.

SECTION B (52 Marks)
(Attempt any two questions)

Q.6   Refer **Figure(3)**. It shows pictorial view of an object. Draw using FIRST angle   (26)
       method of projection
           i) Front View
           ii) Top View
           iii) Left Hand Side View

FIGURE 3

Q.7   Refer Figure (4). It shows Front view and Top View of an object in First Angle   (26)
       method of projection. Draw the isometric view. Mention "o" and 30°. Do not
       insert dimensions.

FIGURE 4.

P.T.O

Q.8   Refer **Figure (5)**.It shows the pictorial view of an object. Copy the given figure.   (26)
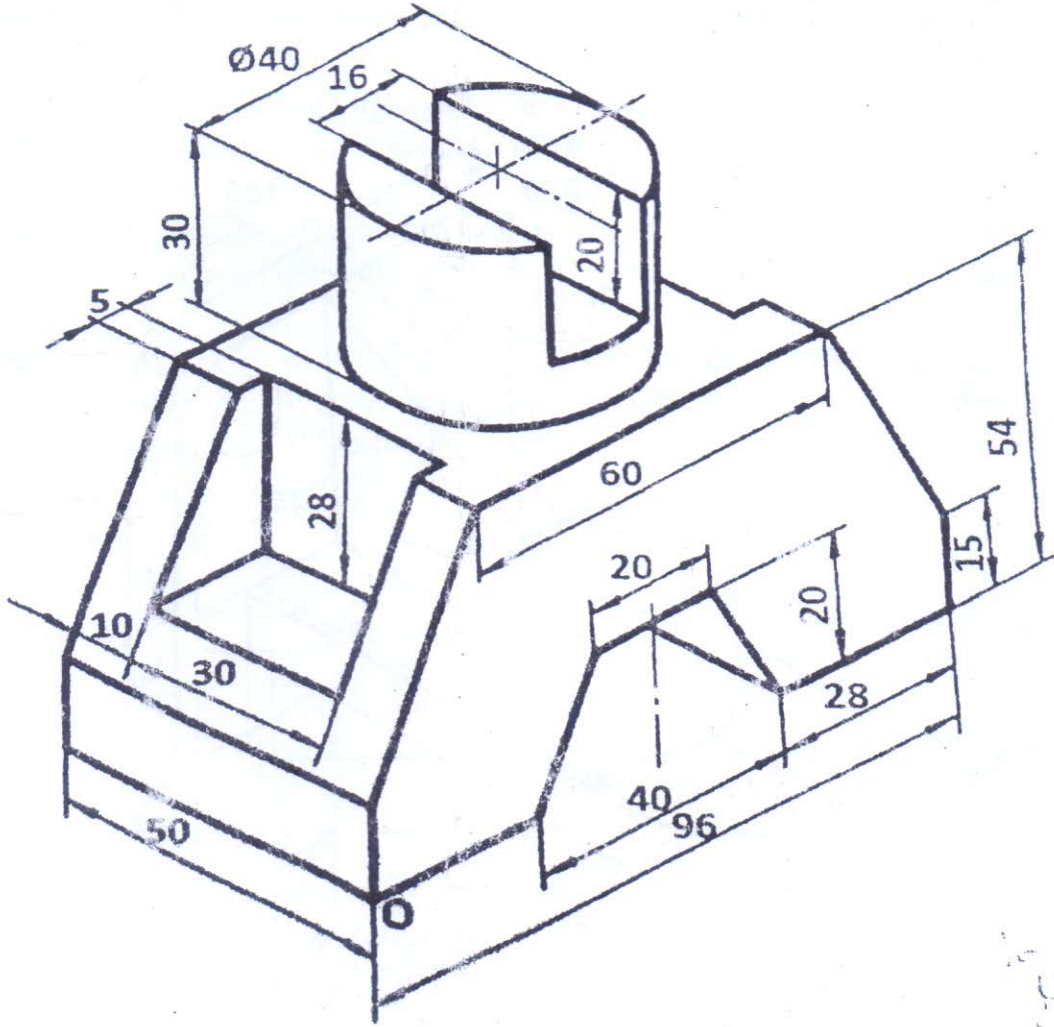   (Do not insert any dimensions).

FIGURE 5.