

**ENGINEERING DRAWING**

(Common to CSE, PCE, IT, Chem E, Aero E, Auto E, Min E, Pet E, & Metal E)

Time: 3 hours

Max. Marks: 70

Question Paper Consists of **Part-A** and **Part-B**  
 Answering the question in **Part-A** is Compulsory,  
 Three Questions should be answered from **Part-B**

\*\*\*\*\*

**PART-A**

1. (a) A thin rectangular plate of sides 60mm x 30mm has its shorter side in VP and inclined at  $30^\circ$  to HP. Project its top view, if its front view is a square of 30mm long sides.
- (b) Draw Fig.1 (i) Front view (ii) Top view (iii) Right side view

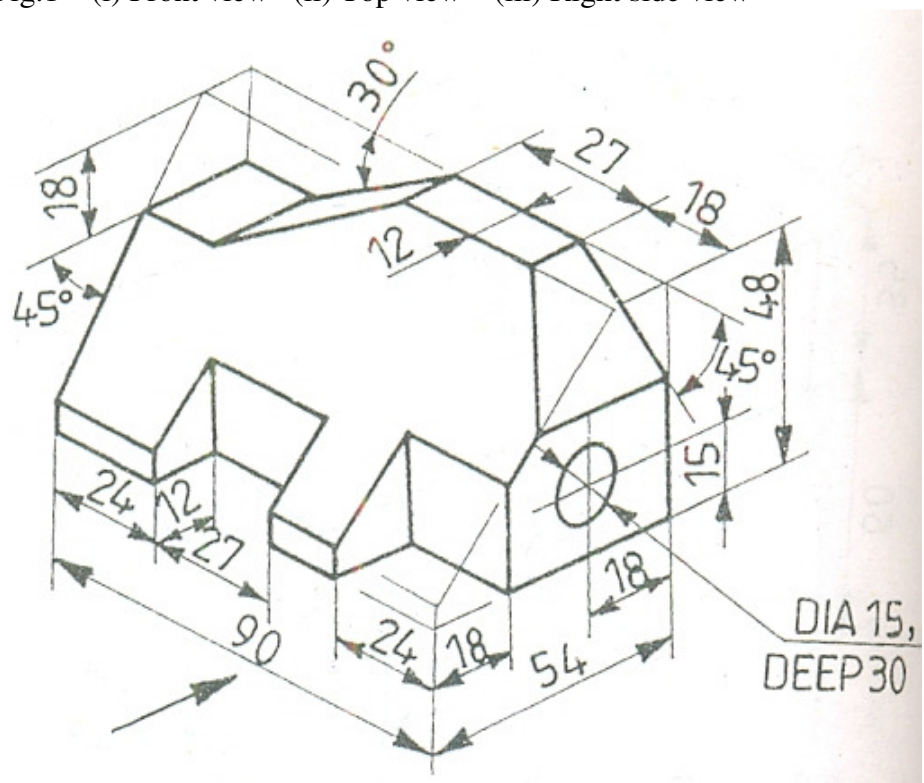


Fig.1

[10+12]

**PART-B**

2. (a) Draw a scale of full size, showing 1/100 inch and measure up to 5 inches.
  - (b) Construct a regular pentagon of side 30mm.
- [10+6]
3. (a) A point P is 20mm below HP and lies in the third quadrant. Its shortest distance from xy is 40mm. Draw its projections.



3. (b) The top view of a 75mm long line measures 55mm. The line is in the VP; its one end being 25mm above the HP. Draw its projections. [8+8]
4. (a) The front view of a line AB measures 70mm and makes an angle of  $45^\circ$  with xy. A is in the HP and the VT of the line is 15mm below the HP. The line is inclined at  $30^\circ$  to the VP. Draw the projections of AB, and find its true length, inclination with the HP and its HT. [10+6]
- (b) The projections on the XY line of the horizontal and vertical traces of a straight line AB in the first quadrant are 120mm apart. The VT is 100mm above XY and HT 50mm in front of XY. The points A and B are 30mm and 80mm above the HP respectively. Draw the projections. [10+6]
5. (a) Draw the projections of a pentagonal sheet of 26mm side, having its surface inclined at  $30^\circ$  to VP. Its one side is parallel to VP and inclined at  $45^\circ$  to HP. [16]
- (b) An equilateral triangle of 5cm side has its VT parallel to and 2.5cm above xy. It has no HT. draw its projections when one of its sides is inclined at  $45^\circ$  to the VP. [16]
6. Draw the projections of a cone, base 75mm diameter and axis 100mm long, lying on the ground on one of its generators with the axis parallel to the VP. [16]
7. Draw the isometric view of Fig.2 [16]

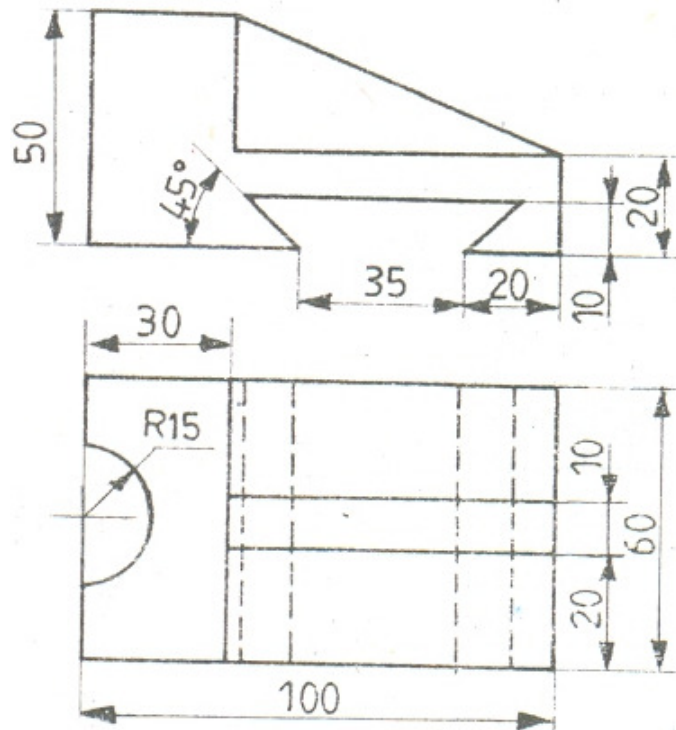


Fig.2

[16]

