I B. Tech II Semester Supplementary Examinations, January/February - 2023
ENGINEERING DRAWING
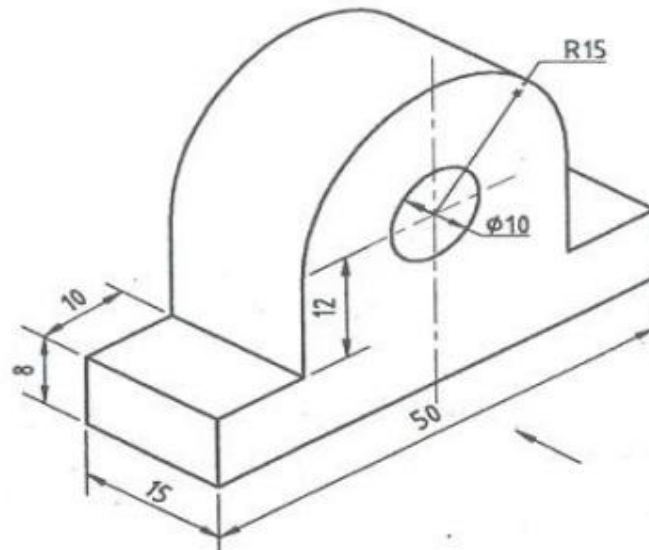(Common to CE, ME, CSE, PCE, IT, Chem. E , Aero E, Auto E, Min E, Pet E, Metal E and Textile Engg)

Time: 3 hours   Max. Marks: 70

*Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)*
*2. Answering the question in **Part-A** is Compulsory*
*3. Answer any **THREE** Questions from **Part-B***
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PART –A (22 Marks)

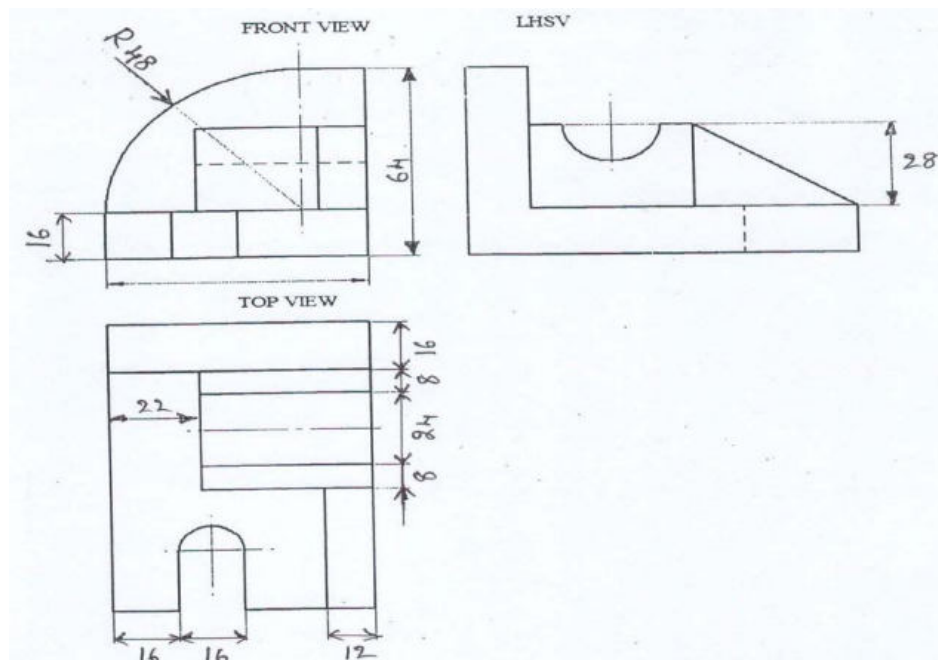1. a) Draw the elevation and plan of the block shown below.   [10M]

   b) A line AB 55 long has its end A 25mm in front of VP and in the HP. The line is inclined at 45^0 to VP. Draw its projections. Also mark the traces.   [8M]

   c) Construct a regular hexagon about a side of 25mm.   [4M]

PART –B (48 Marks)

2. a) The distance between Coimbatore and Madurai is 200 km and its equivalent distance on the map measures 10 cm. Draw a diagonal scale to indicate 223 km and 135 km.   [8M]

   b) Draw an ellipse by arc of circles method, given the major and minor axes as 80mm and 50mm respectively.   [8M]

3. a) A point P is 10 mm above HP and 25 mm in front of VP. Point Q is 50 mm above HP and 45 mm in front of VP. The distance between the projectors is 55 mm. Draw the projections and draw the projection of line joining P & Q.   [8M]

b) A line PQ 80mm long is parallel to VP and inclined to HP at 30 . End P is [8M] 30mm above the HP and 20mm in front of the VP. Draw the front view and the top view.

4. The front view of a line AB measures 65mm long and makes an angle of 45° [16M] with XY. Its end A is in the H.P and 15mm in front of V.P. The line is inclined at 30° to the V.P. Draw the projections of AB and find its true length and it's inclination with the H.P.

5. A regular pentagonal lamina ABCDE of side 25mm rests on HP on its corner D [16M] such that the plane of lamina is inclined to HP at 45^0, its side AB is parallel to HP and inclined to the VP at 45^0. Draw the projections.

6. a) A cone of base diameter 50 mm and axis length 60 mm is resting on VP on a [8M] point on the circumference of the base with it axis inclined at 40° to VP and parallel to HP. Draw its projections.

b) A cylinder of base diameter 50 mm and axis length 70 mm is resting on HP on [8M] one of its generators with its axis inclined at 50^0 to VP. Draw its projections.

7. Draw the isometric view of the given orthographic projection of the object. All [16M] dimensions are in mm. Assume any missing dimension.

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