Code No: R10205/R10

Set No. 1

I B.Tech II Semester Supplementary Examinations, February 2013
ENGINEERING DRAWING
(Common to EEE,MM and IT)

Time: 3 hours   **Max Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks
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1. (a) Draw a square of 60mm side with two edges horizontal. Construct another square with vertices as mid points of the 60mm edge square.
   (b) The distance between two towns is 300km and it is shown on a map as 15cm. Draw a diagonal scale to indicate 148 km and 264 km.   [5+10]

2. (a)A line of 60mm long is parallel to and 30 mm from HP inclined at 45^0 to VP and its one end in the VP. Draw its projections.
   (b) A line 80mm long is parallel to HP and 30mm from it, is perpendicular to VP with one end at 20 mm from VP. Draw its projections.   [8+7]

3. A straight line AB is 80 mm long. Its one end is in VP and the other end is in HP. Its top and front views measure 60 mm and 70 mm respectively. Draw its projections and determine its inclinations with the HP and the VP.   [15]

4. Draw the projections of a hexagonal lamina of 50 mm side, with a square hole of 20 mm side centrally punched on it, when it is resting on one of its sides, with the surface inclined at 60^0? to VP and the nearest corner is 30 mm from the VP. [15]

5. A hexagonal prism of a side 20mm and 60mm long is resting the ground with one of its base edges such that its axis inclined at 60^0 to the HP. Draw its Projections. [15]

6. A pentagonal pyramid side of base 30 mm and axis 70 mm long has one of its slant edges in the HP and inclined at 30^0 to the VP. Draw the projections of the solid when apex is towards the observer.   [15]

7. Draw orthographic projections to the following isometric view.   [15]

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8. A frustum of a cone of base diameter 50mm, top diameter 30mm, and height 45mm is resting upon its base on HP. Draw the isometric projection of the frustum. [15]

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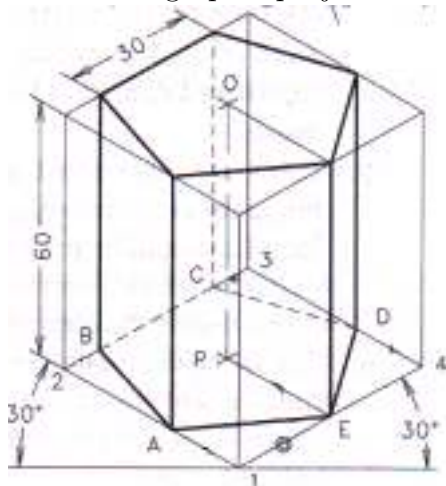
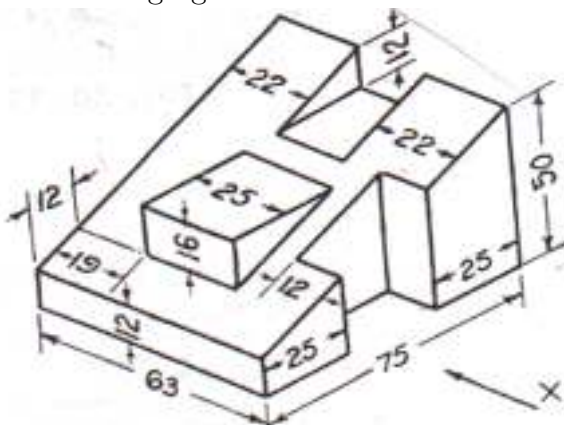$$\boxed{\textbf{Set No. 2}}$$

I B.Tech II Semester Supplementary Examinations, February 2013
ENGINEERING DRAWING
(Common to EEE,MM and IT)

Time: 3 hours　　　　　　　　　　　　　　　　　　　Max Marks: 75

Answer any FIVE Questions
All Questions carry equal marks
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1. On a map, 100 cm x 120 cm represents an area of 2400 m^2. Draw a diagonal scale showing meters, decimeters, and centimeters and to measure up to 3 meters. Show a length of 1.64 meters on it. [15]

2. (a) A line KL 60 mm long has its end K 30 mm above HP and 20mm infront of VP. It is perpendicular to HP and parallel to VP. Draw its projections.

   (b) A 70 mm long line PQ has its end P 20 mm above HP and 15 mm infront of VP. The line is inclined at 40^0 to VP and parallel to HP. Draw its projections. [7+8]

3. A line AB has its end A, 15 mm above the HP and 20 mm in front of the VP The end B is 40 mm in front of the VP. The front view of the line measures 70 mm. The distance between the end projectors is 50 mm. Draw the projections of the line and find its true length and its true inclinations with the VP and the HP. [15]

4. A regular pentagonal plate of 25 mm side, rests on HP on one of its sides such that its surface is inclined at 45^0 to HP and the side of pentagon on which it rests, inclined at 45^0 to the VP. Draw the projections of the plate. [15]

5. A triangular prism, base 40 mm side and height 65 mm is resting on the ground with one of its rectangular faces such that the axis of the prism is perpendicular to the profile plane. Draw its projections. [15]

6. A square pyramid, base 40mm side and axis 75mm long is placed on the ground on one of its slant edge, so that vertical plane passing through that edge and axis making an angle of 30^0 with the VP. Draw its projections. [15]

7. Draw the front view looking from the direction of X, and top view, side view from the following figure. [15]
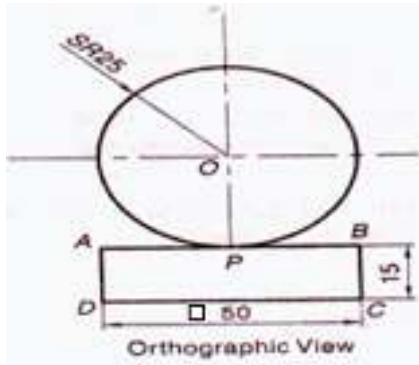

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8. Draw the isometric view of a following fig. [15]

Orthographic View

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I B.Tech II Semester Supplementary Examinations, February 2013
ENGINEERING DRAWING
(Common to EEE,MM and IT)

Time: 3 hours   Max Marks: 75

Answer any FIVE Questions
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⋆ ⋆ ⋆ ⋆ ⋆

1. Construct a diagonal scale of five times the full scale to read accurately upto 0.2 mm and mark on it the following lengths 4.96 cm, 28.8 mm, 2.02 cm. [15]

2. (a) A line KL 60 mm long has its end K 30 mm above HP and 20mm infront of VP. It is perpendicular to HP and parallel to VP. Draw its projections.

   (b) A 70 mm long line PQ has its end P 20 mm above HP and 15 mm infront of VP. The line is inclined at 40^0 to VP and parallel to HP. Draw its projections.
   [7+8]

3. Line PQ is parallel to VP and inclined at an angle of 45^0 to HP and measures 60 mm in top view. Its end P is 20mm above the HP and 20 mm in front of the VP. Draw its projection. [15]

4. A circular lamina of diameter 80 mm has the end P of the diameter PQ in the HP and the end Q in the VP. Draw its top and front views when its surface is inclined at 50^0 to the HP and 40^0 to the VP. [15]

5. Draw the projections of a Pentagonal prism of base 30 mm and axis 60mm long, when its axis is inclined at 30^0 to HP. And has an edge of the base resting in the HP and inclined at 60^0 to VP. [15]

6. Draw the projections of a pentagonal pyramid having side of base 30 mm and length of axis 70 mm when it is resting with a triangular face in VP. [15]

7. Draw the front view looking from the direction of X, and top view, side view from the following figure. [15]

8. A cone of height 50mm and base diameter 48mm is resting on HP, keeping its axis vertical. Draw isometric view of the solid. [15]

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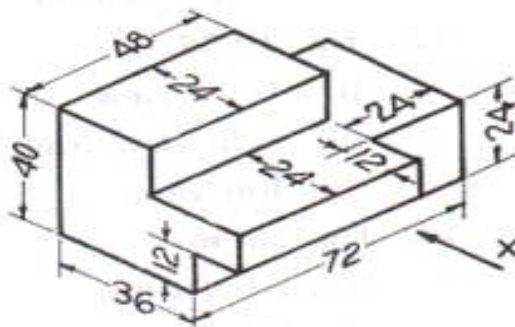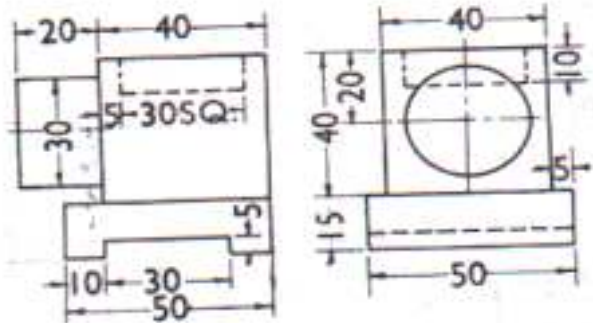1 of 1

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Set No. 4

I B.Tech II Semester Supplementary Examinations, February 2013
ENGINEERING DRAWING
(Common to EEE,MM and IT)

Time: 3 hours **Max Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks
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1. On a map, 100 cm x 100 cm represents an area of 2500 m^2. Draw a diagonal scale showing meters, decimeters, and centimeters and to measure up to 4 meters. Show a length of 2.73 meters on it. [15]

2. (a)A line AB, 60 mm in length is perpendicular to the horizontal plane and 30mm in front of the vertical plane. End B is a 25 mm above the HP. Draw its projection.
   (b) Draw the front and top views of a line PQ 50 mm long, inclined to VP at an angle of 30^0 towards left and parallel to HP. The end Q is 25 mm from HP and 20 mm from VP. [7+8]

3. Draw the projections of a line AB, 100mm long inclined at 30^0 to HP and 45^0 to VP. The end A of the line is 20mm above HP and 25mm infront of VP. The line slopes upward forward right. [15]

4. A square lamina ABCD of side 45 mm rests on the ground on its corner A in such a way that the diagonal AC is inclined at 45^0 to the HP and apparently inclined at 30^{0}to the VP. Draw its projections. [15]

5. A cylinder of diameter 35mm and height 60mm is resting on its base with its axis making an angle 45^0 to HP. and parallel to the VP. Draw its projections [15]

6. A hexagonal pyramid, base 25mm side and axis 55mm long, has one of its slant edges on the ground. A plane containing that edge and the axis is perpendicular to the HP and inclined at 45^0 to the VP. Draw its projections, when the apex is nearer the VP than the base. [15]

7. Draw the front view looking from the direction of X, and top view, side view from the following figure. [15]

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8. Draw the isometric view for the following orthographic projections. [15]

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