Subject Code : R10205/R10 **Set No - 1**

I B.Tech II Semester Supplementary Examinations January / February - 2012

ENGINEERING DRAWING

(Common to Electrical & Electronic Engineering, Mining, & Information Technology)

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

Answer any FIVE Questions

All Questions carry equal marks

* * * * *

1. The distance between two towns is 200 km. In a map it is represented by 5cm long line. Find it's R.F. Draw a diagonal scale and show
(a) 269km (b) 572 km (c) 49 km and (d) 130km on it.

[15M]

2.(a) A 75mm long line AB is in both HP and VP. Draw the projections of the line.

(b) A 90 mm long line PQ is parallel to and 20mm infront of VP. Its one end is 20mm above HP while the other is 40mm belowHP. Draw the projections of the line and find its inclination with the HP.

[7M + 8M]

3. Top view of a 75 mm long line CD measures 50mm. End C is in HP and 50mm in front of VP. End D is 15mm in front of VP and it is above HP. Draw projections of CD and find angles of inclination with HP and VP.

[15M]

4. A rrectangle of 30mm and 40mm sides is resting on HP on one small side which is inclined at 30^0 to VP. The surface of the plane makes 45^0 inclination with HP. Draw it's projections.

[15M]

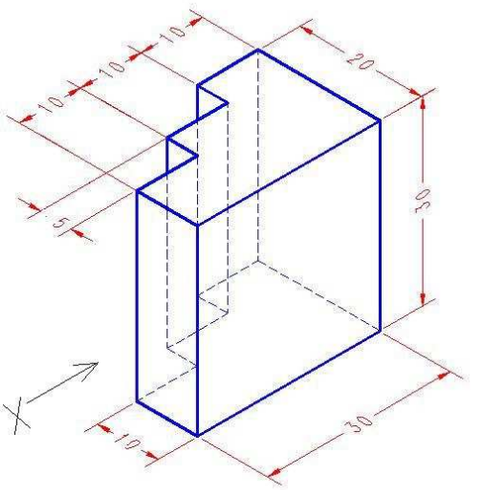
5. A cylinder of base diameter 50mm and axis length 60mm is resting on a point of the base circle on HP. Draw the projections of the cylinder if the axis is inclined at 30^0 to HP.

[15M]

6. A pentagonal pyramid 30mm base side and 60 mm axis length is resting on an edge of the base in HP. The triangular face containing that edge is vertical. Draw the projections of the pyramid.

[15M]

7. Draw front view, top view and left side view of the solid shown below.



[15M]

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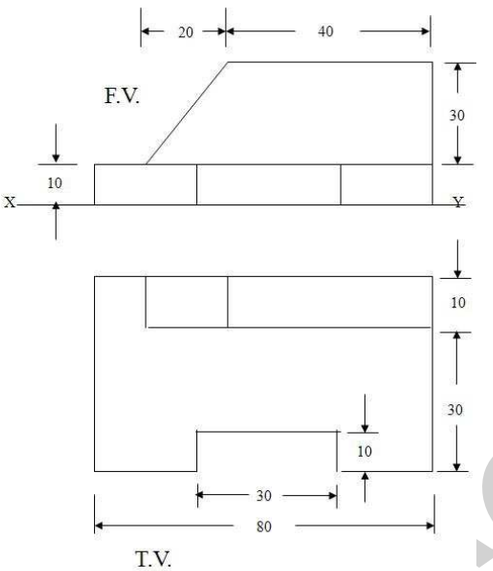
Set No - 1

8. Draw the isometric view of the object whose projections are shown in figure below.



[15M]

Subject Code : R10205/R10 **Set No - 2**

I B.Tech II Semester Supplementary Examinations January / February - 2012

ENGINEERING DRAWING

(Common to Electrical & Electronic Engineering, Mining, & Information Technology)

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

Answer any FIVE Questions

All Questions carry equal marks

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1. A map of size 250cm X 100cm wide represents an area of 6250 sq.Kms. Construct a vernier scale to show decameters and long enough to measure up to 7km. Indicate on it
(a) 6.32km (b) 3.5km and (c) 0.91km. [15M]

2.(a) A 65mm long vertical line AB has the nearest end A is 20mm above HP. Draw the projections of the line if it is 25mm infront of VP.

(b) A 80 mm long line PQ is in HP. Its one end is 20mm infront of VP while the other is 55mm infront of VP. Draw the projections of the line and find its inclination with the VP. [7M + 8M]

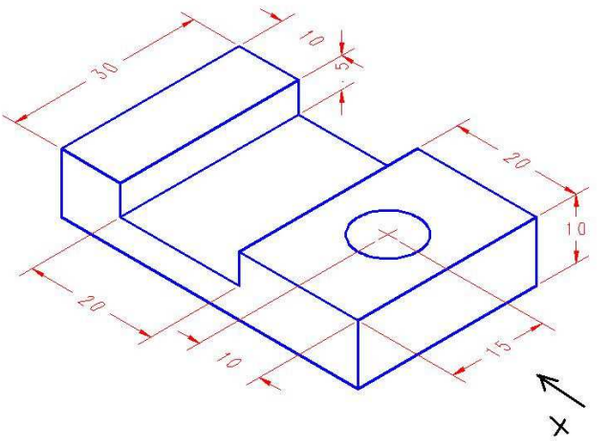
3. A line CD is 75mm long. Its front and top views measure 50mm & 60mm respectively. End A is 20mm above HP and 20mm in front of VP. Draw projections of line CD. Find angles of inclination of the line with HP and VP. [15M]

4. A regular pentagon of 30mm sides is resting on HP on one of it's sides. Its surface is inclined at 45^0 to HP. Draw it's projections when the side which is in HP makes 30^0 angle with VP. [15M]

5. A square prism of 40mm base side and 60mm axis length has a rectangular face on the ground and the axis makes an angle of 45^0 with the VP. Draw the projections of the prism. [15M]

6. A cone of 40mm diameter and 60mm axis is resting on one of its generator on VP with axis parallel to HP. Draw the projections of the cone. [15M]

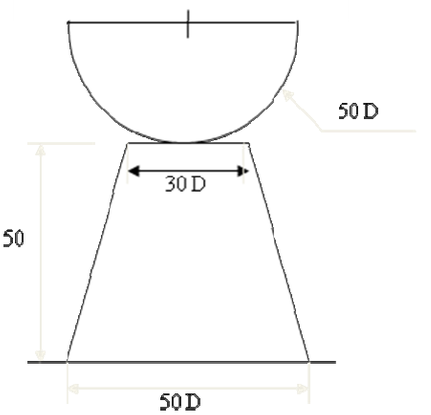
7. Draw the front view, top view and left side view of the block shown in figure below.



[15M]

Subject Code : R10205/R10 **Set No - 2**

8. A hemi-sphere is centrally placed on the top of a frustum of a cone the front view of which shown in fiure below**.** Draw isometric projections of the assembly.



[15M]

Set No - 3

Subject Code : R10205/R10

I B.Tech II Semester Supplementary Examinations January / February - 2012

ENGINEERING DRAWING

(Common to Electrical & Electronic Engineering, Mining, & Information Technology)

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

Answer any FIVE Questions

All Questions carry equal marks

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1. Construct a heptagon of edge length 40mm. Construct a pentagon of same edge length inside the heptagon with one edge of the polygons being common. [15M]

2.(a) A 60mm long line AB is perpendicular to VP. The nearest end A is 20mm infront of VP. Draw the projections of the line if it is 20mm above HP

(b) A 80 mm long line PQ is parallel to and 20 mm above HP. Its one end is 20mm infront of VP while the other is on VP. Draw the projections of the line and find its inclination with the VP. [7M + 8M]

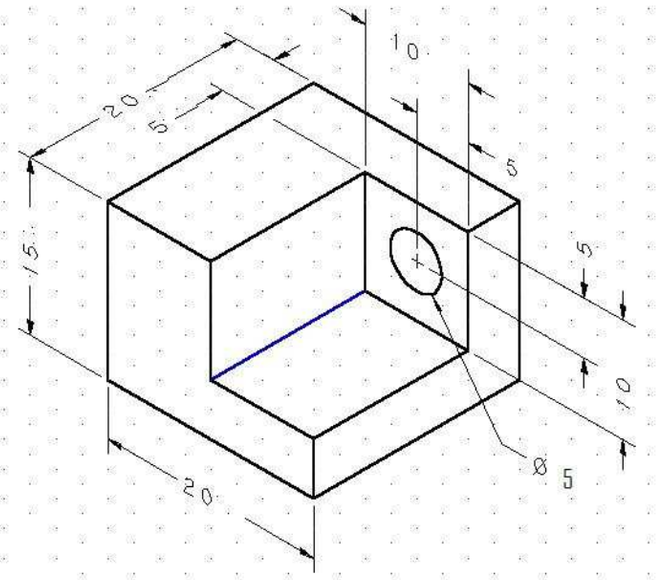
3. A line CD 75mm long is inclined at 45^0 to VP, while its front view is inclined at 55^0. End A is 20mm above HP and 25mm in front of VP. Draw the projections of the line and find it's inclination with HP. [15M]

4. A circle of 40 mm diameter is resting on HP on end A of its diameter AB. AB is inclined at 30^0 to HP while its top view is inclined at 45^0 to VP. Draw the projections of the circle. [15M]

5. A cube of 50mm long edges is so placed on HP on one corner such that a body diagonal is parallel to HP. Draw its projections. [15M]

6. A cone of 40mm diameter and 50mm axis is resting on one of its generator on HP with axis parallel to VP. Draw the projections of the cone. [15M]

7. Draw the front view, top view and left side view of the block shown in figure below.



[15M]

Subject Code : R10205/R10

Set No - 3

8. A triangular pyramid of 30mm base side and 50mm long axis, is centrally placed on the top of a cube of 50 mm long edges. Draw isometric view of the composite solid.

[15M]

Set No - 4

Subject Code : R10205/R10

I B.Tech II Semester Supplementary Examinations January / February - 2012

ENGINEERING DRAWING

(Common to Electrical & Electronic Engineering, Mining, & Information Technology)

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

Answer any FIVE Questions

All Questions carry equal marks

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1. Draw an ellipse by arcs of circle method whose majoror and minor axes are 100mm and 70mm long. Draw a tangent and normal at a point 25mm above major axis.

[15M]

2.(a) A 70mm long line AB is parallel to both HP and VP and is 20mm from these planes. Draw the projections of the line assuming it to be in I.quadrant..

(b) A 90 mm long line PQ is parallel to and 25 mm in front of VP. Its one end is in HP while the other is 50 mm above the HP. Draw the projection and find its inclination with the VP.

[7M + 8M]

3. Line AB is 75mm long and it is inclined at 30^0 & 40^0 to HP and VP respectively. End A is 12mm above HP and 10mm in front of VP. Draw the projections and find their apparent inclinations to HP and VP

[15M]

4. A hexagonal lamina of length of edge 30mm has its one side in HP and Its apposite parallel side is 25mm above HP and In VP. Draw the projections of the hexagon.

[15M]

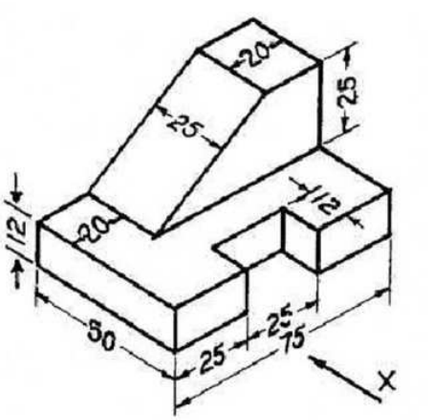
5. A cylinder 40mm diameter and 50mm axis is resting on one point of a base circle on VP while its axis makes 45^0 with VP. Draw projections of the cylinder.

[15M]

6. A pentagonal pyramid of 40mm base edge and 60mm long axis, has a triangular face on the ground and the vertical plane containing the axis makes an angle of 45^0 with the VP. Draw its projections of the pyramid.

[15M]

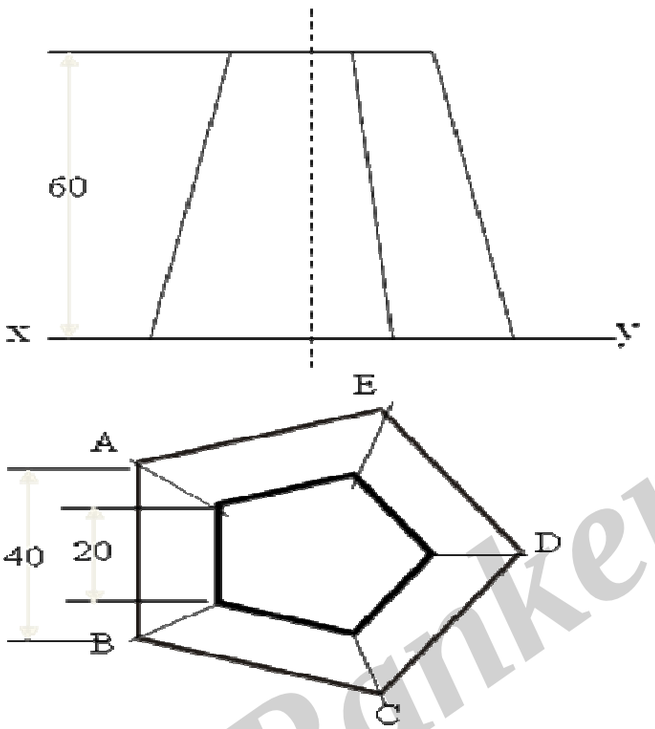
7. Draw the front view, top view and left side view of the block shown in figure below.



[15M]

Subject Code : R10205/R10 **Set No - 4**

8. Draw the isometric view of the frustrum of the pentagonal pyramid whose projections are shown in the figure below



[15M]