Code.No: 07A10491 | R07 | SET-1

I B.TECH – EXAMINATIONS, JUNE - 2011
ENGINEERING DRAWING

Time: 3hours **Max.Marks:80**

Answer any FIVE questions
All questions carry equal marks

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1 A stone is thrown from a building 6.0 meters height. It just crosses the top of a tree 12 meters high. Trace the path of projectile if the horizontal distance between the building and the tree be 4.0 meters. Also find the distance of the point from the building where the stone falls on the ground. [16]

2 Draw a hypocycloid of a circle of 4 cm diameter which rolls inside another circle of 20 cm diameter for one revolution and also draw a tangent and normal at a point 9 cm from the centre of the base circle. [16]

3 The front view of a line AB 80 mm long measures 55 mm while its top view measures 70 mm. End A is in both HP and VP. Draw the projections of the line and find its inclinations with the reference planes. [16]

4 A regular hexagonal lamina with its edge 50 mm has its plane inclined at 45^o to H.P and lying with one of its edges in H.P. The plane of one of its diagonals is inclined at 45^o to XY. The corner nearest to VP is 15mm in front of it. Draw its projections. [16]

5 A cone of base 60 mm diameter and axis 80 mm long lies on HP with its axis inclined 45^o and $30^o$to HP and VP respectively. Draw the top and front views of the cone. [16]

6 The hexagonal pyramid base 30 mm side and axis 60 mm long has one of its slant edges on HP such that two of its triangular faces containing the slant edge on which it rests are equally inclined to HP. The top view of the axis appears to be inclined at 45^o to VP. Draw its projections when its base is nearer to the observer than its apex. [16]

7 The orthogonal views of the picture as shown in figure 1 below. Convert them in to isometric view. All dimensions are in mm. [16]

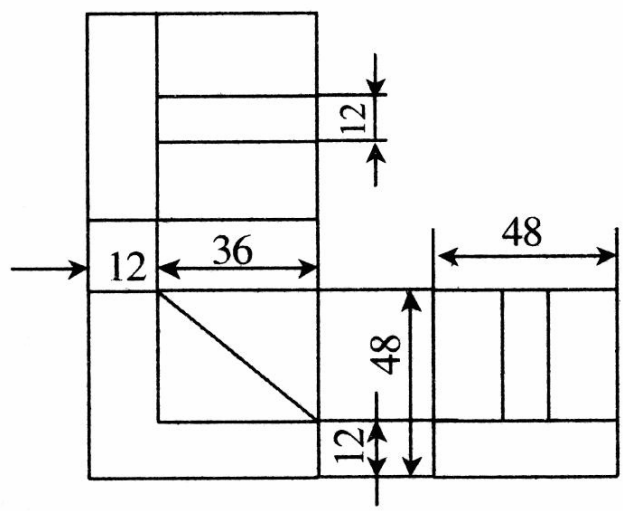


Fig: 1

8. Draw the following views of the object given in figure 2 below. All dimensions are in mm.
   a) Front view b) Top view and c) Right side view. [16]

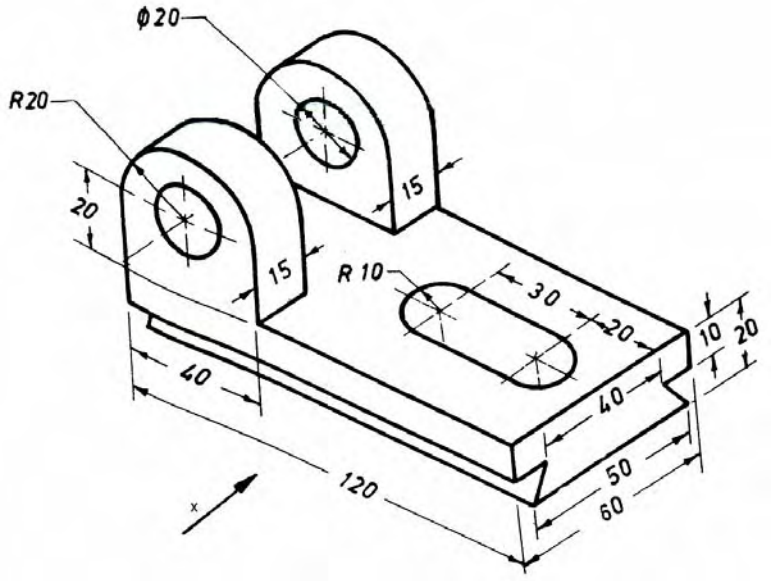


Fig: 2

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Code.No: 07A10491 | R07 | SET-2

I B.TECH – EXAMINATIONS, JUNE - 2011
ENGINEERING DRAWING

Time: 3hours **Max.Marks:80**

Answer any FIVE questions
All questions carry equal marks
- - -

1. The front view of a line AB 80 mm long measures 55 mm while its top view measures 70 mm. End A is in both HP and VP. Draw the projections of the line and find its inclinations with the reference planes. [16]

2. A regular hexagonal lamina with its edge 50 mm has its plane inclined at 45^o to H.P and lying with one of its edges in H.P. The plane of one of its diagonals is inclined at 45^o to XY. The corner nearest to VP is 15mm in front of it. Draw its projections. [16]

3. A cone of base 60 mm diameter and axis 80 mm long lies on HP with its axis inclined 45^o and $30^o$to HP and VP respectively. Draw the top and front views of the cone. [16]

4. The hexagonal pyramid base 30 mm side and axis 60 mm long has one of its slant edges on HP such that two of its triangular faces containing the slant edge on which it rests are equally inclined to HP. The top view of the axis appears to be inclined at 45^o to VP. Draw its projections when its base is nearer to the observer than its apex. [16]

5. The orthogonal views of the picture as shown in figure 1 below. Convert them in to isometric view. All dimensions are in mm. [16]

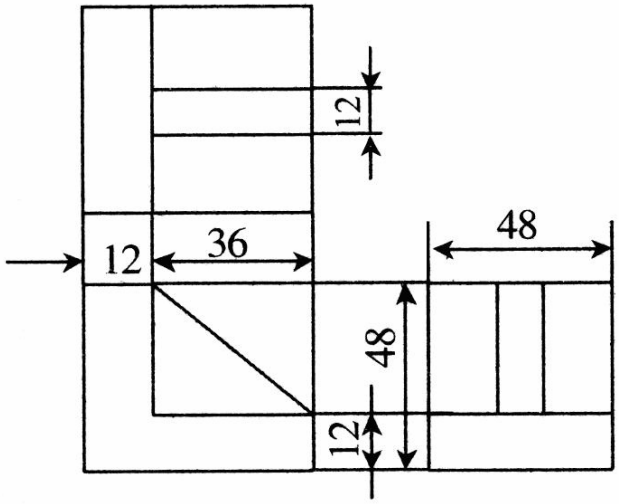


Fig: 1

6. Draw the following views of the object given in figure 2 below. All dimensions are in mm.

a) Front view b) Top view and c) Right side view. [16]

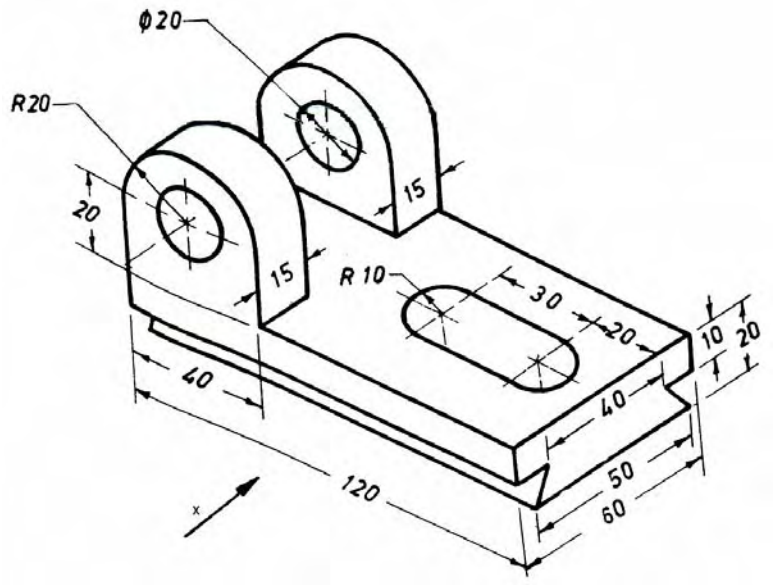


Fig: 2

7. A stone is thrown from a building 6.0 meters height. It just crosses the top of a tree 12 meters high. Trace the path of projectile if the horizontal distance between the building and the tree be 4.0 meters. Also find the distance of the point from the building where the stone falls on the ground. [16]

8. Draw a hypocycloid of a circle of 4 cm diameter which rolls inside another circle of 20 cm diameter for one revolution and also draw a tangent and normal at a point 9 cm from the centre of the base circle. [16]

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Code.No: 07A10491 | R07 | SET-3

I B.TECH – EXAMINATIONS, JUNE - 2011
ENGINEERING DRAWING

Time: 3hours **Max.Marks:80**

Answer any FIVE questions
All questions carry equal marks

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1. A cone of base 60 mm diameter and axis 80 mm long lies on HP with its axis inclined 45^o and 30^{o}to HP and VP respectively. Draw the top and front views of the cone. [16]

2. The hexagonal pyramid base 30 mm side and axis 60 mm long has one of its slant edges on HP such that two of its triangular faces containing the slant edge on which it rests are equally inclined to HP. The top view of the axis appears to be inclined at 45^o to VP. Draw its projections when its base is nearer to the observer than its apex. [16]

3. The orthogonal views of the picture as shown in figure 1 below. Convert them in to isometric view. All dimensions are in mm. [16]

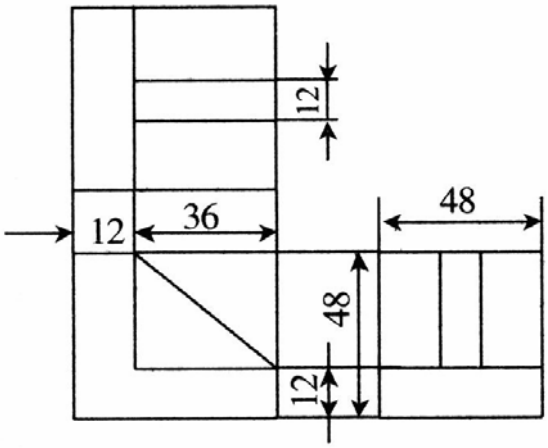


Fig: 1

4. Draw the following views of the object given in figure 2 below. All dimensions are in mm.

a) Front view b) Top view and c) Right side view. [16]

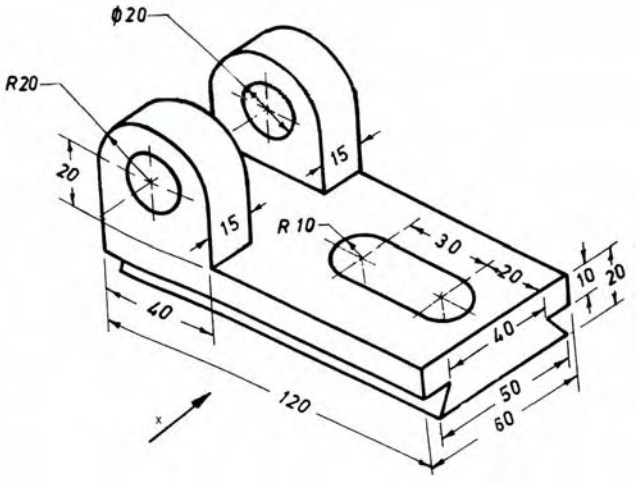


Fig: 2

5. A stone is thrown from a building 6.0 meters height. It just crosses the top of a tree 12 meters high. Trace the path of projectile if the horizontal distance between the building and the tree be 4.0 meters. Also find the distance of the point from the building where the stone falls on the ground. [16]

6. Draw a hypocycloid of a circle of 4 cm diameter which rolls inside another circle of 20 cm diameter for one revolution and also draw a tangent and normal at a point 9 cm from the centre of the base circle. [16]

7. The front view of a line AB 80 mm long measures 55 mm while its top view measures 70 mm. End A is in both HP and VP. Draw the projections of the line and find its inclinations with the reference planes. [16]

8. A regular hexagonal lamina with its edge 50 mm has its plane inclined at 45^o to H.P and lying with one of its edges in H.P. The plane of one of its diagonals is inclined at 45^o to XY. The corner nearest to VP is 15mm in front of it. Draw its projections. [16]

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Code.No: 07A10491	R07	SET-4

I B.TECH – EXAMINATIONS, JUNE - 2011
ENGINEERING DRAWING

Time: 3hours **Max.Marks:80**

Answer any FIVE questions
All questions carry equal marks

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1. The orthogonal views of the picture as shown in figure 1 below. Convert them in to isometric view. All dimensions are in mm. [16]

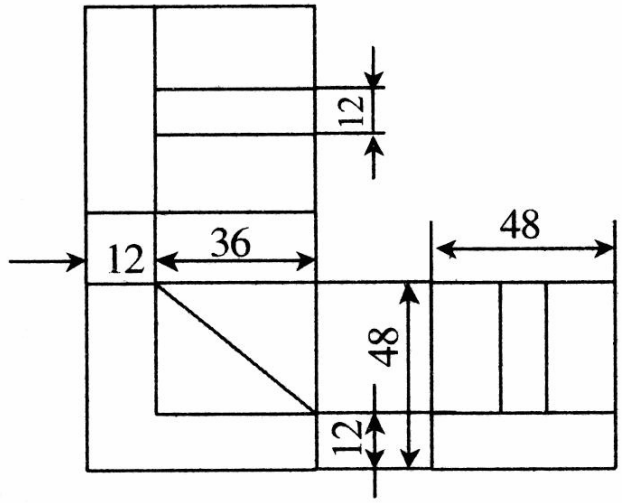


Fig: 1

2. Draw the following views of the object given in figure 2 below. All dimensions are in mm.
   a) Front view b) Top view and c) Right side view. [16]

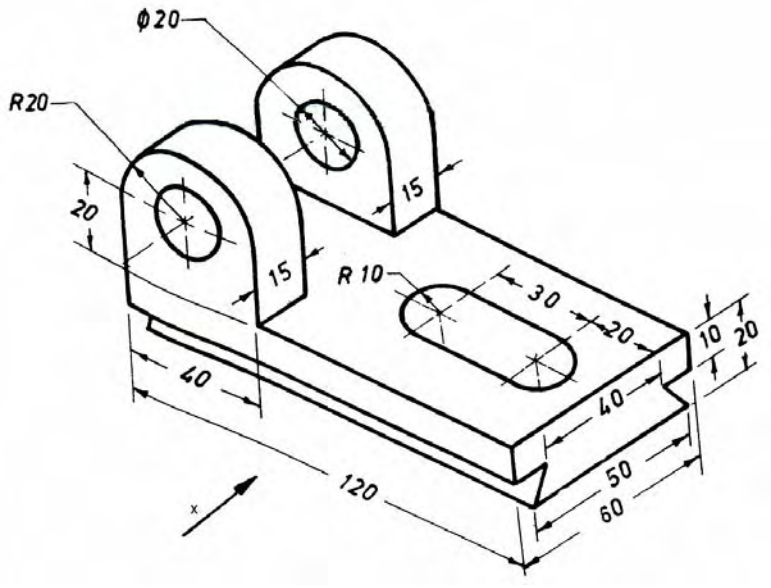


Fig: 2

3. A stone is thrown from a building 6.0 meters height. It just crosses the top of a tree 12 meters high. Trace the path of projectile if the horizontal distance between the building and the tree be 4.0 meters. Also find the distance of the point from the building where the stone falls on the ground. [16]

4. Draw a hypocycloid of a circle of 4 cm diameter which rolls inside another circle of 20 cm diameter for one revolution and also draw a tangent and normal at a point 9 cm from the centre of the base circle. [16]

5. The front view of a line AB 80 mm long measures 55 mm while its top view measures 70 mm. End A is in both HP and VP. Draw the projections of the line and find its inclinations with the reference planes. [16]

6. A regular hexagonal lamina with its edge 50 mm has its plane inclined at 45^o to H.P and lying with one of its edges in H.P. The plane of one of its diagonals is inclined at 45^o to XY. The corner nearest to VP is 15mm in front of it. Draw its projections. [16]

7. A cone of base 60 mm diameter and axis 80 mm long lies on HP with its axis inclined 45^o and $30^o$to HP and VP respectively. Draw the top and front views of the cone. [16]

8. The hexagonal pyramid base 30 mm side and axis 60 mm long has one of its slant edges on HP such that two of its triangular faces containing the slant edge on which it rests are equally inclined to HP. The top view of the axis appears to be inclined at 45^o to VP. Draw its projections when its base is nearer to the observer than its apex. [16]

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