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Reg. No. : ....

Name : ....

SECOND SEMESTER B.TECH. DEGREE EXAMINATION, MAY/JUNE 2016
Course Code : BE110
Course Name : ENGINEERING GRAPHICS

Max. Marks : 50

Duration : 2 Hours

PART – A

Answer **any one** question :

(1×11=11 **Marks**)

1. An 80 mm long line PQ has its end P on the HP and 15 mm in front of the V.P. The line is inclined at 30° to the HP and its top view is inclined at 60° to the reference line. Draw the projections of line PQ and determine true angle of inclination with the VP.

2. Find graphically the length of the largest rod that can be kept inside a hollow cuboid (rectangular prism) of 60 mm x 40 mm x 30 mm.

PART – B

Answer **any three** questions :

(3×13=39 **Marks**)

3. A square pyramid of base side 30 mm and axis length 60 mm is suspended by means of a string from one of its base corners with its axis parallel to VP. Draw its projections.

4. Isometric view of a cylindrical block is shown in Figure 1. Draw the front view, top view and side view from left. Take the arrow direction F as the front side.
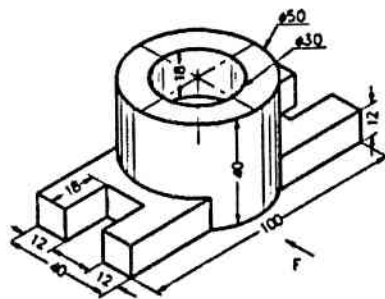

Figure 1

P.T.O.

5. A cylinder of diameter 50 mm and length of the axis 65 mm rests on its base with the axis perpendicular to the HP. It is cut by the cutting plane perpendicular to the VP, inclined at 45° to the HP and passing through a point on axis 25 mm from the top. Draw the front view, the sectional top view and the development of the lateral surface of the cylinder.

6. Draw the perspective projection of a pentagonal prism of side 25 mm and length 50 mm, lying on one of its rectangular faces on the ground plane and one pentagonal face touching the picture plane. The station point is 55 mm in front of the picture plane and lies in the central plane which is 75 mm to the left of the centre of the prism. Station point is 30 mm above the ground plane.

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