Code No: 09A10491

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD
B. Tech I Year Examinations, December-2012
ENGINEERING DRAWING
(Common to ECE, AE)

Time: 3 hours

Max.

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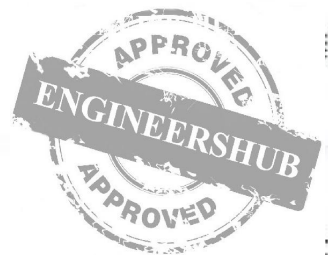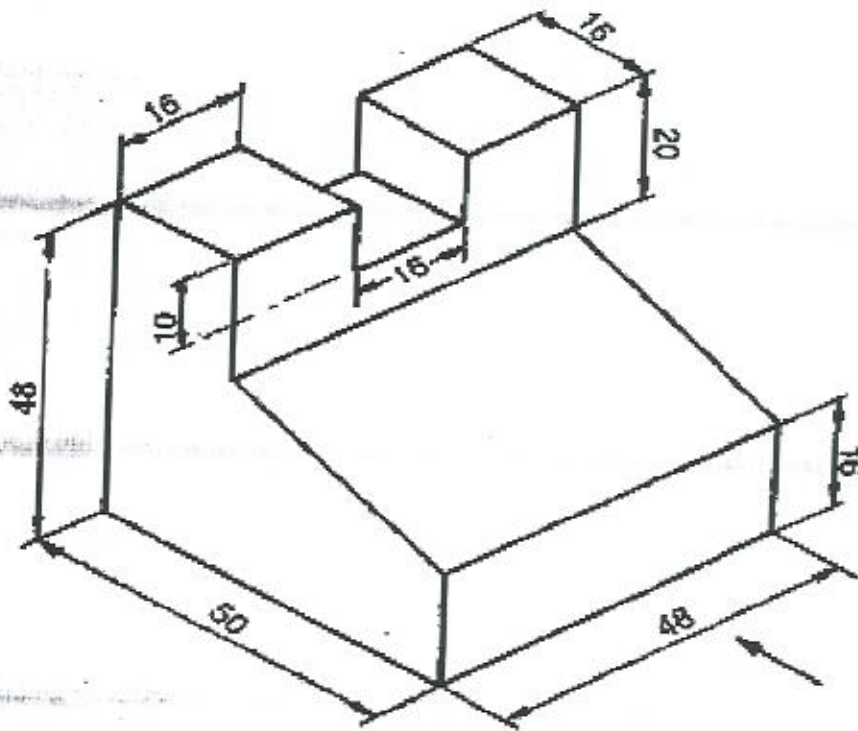- - -

1.a) A point 'P' moves in such a way that it is always equidistant from a given line and a fixed point. The distance between the fixed straight line and fixed point is 50mm. Trace the path of the point 'P'. Draw a tangent and normal at any point.

b) Draw a scale with RF 1:50 to show meters and decimeters and long enough to measure up to 5 meters. Mark a distance of 2.7 meters on it. [15]

2. The top view of a 75mm long line AB measures 65 mm, while the length of its front view is 50 mm. Its one end A is in the H.P and 12 mm in front of the VP. Draw the projections of AB and determine its inclinations with the H.P and the V.P. [15]

3. A semi circular plate of 80mm diameter has its straight edge on V.P is inclined at 30° to H.P when the surface of the plate is inclined at 45° to V.P. Draw its projections. [15]

4. A pentagonal prism of height 60mm and base 30mm is resting on its base with one base edge parallel to V.P. A square hole edge 30mm with axis perpendicular to V.P and bisecting the vertical axis is drilled through the prism. Develop the lateral surface of the prism if sides of the holes are equally inclined to H.P. [15]

5. A cylinder with a 60mm base diameter and height 80mm long is resting on its base on H.P. It is penetrated by another cylinder of 50mm base diameter and height 90mm long, such that their axes intersect each other at right angles. Draw the projections of the combination and show the curves of intersection. [15]

6. A cube with a 60 mm side has square holes of 30 mm side, cut through from all the six faces. The sides of the square holes are parallel to the edges of the cube. Draw the isometric view of the cube. [15]

7. Draw the front view, top view and side view for the given diagram. All dimensions are in mm.

[15]

8. A square prism of base edge 30mm and height 60mm is resting on a face with the axis perpendicular to PP and the nearest base parallel and 20mm behind the PP. The SP is 60mm to the right of the axis of the solid and 50mm above the GP, 25mm in front of PP. Draw the perspective view of the prism. [15]

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