Code.No: 09A10291 | R09 | SET-3

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
I B.TECH – REGULAR EXAMINATIONS JUNE - 2010
ENGINEERING DRAWING
(COMMON TO EEE, EIE, ECC)

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

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

1(a) Construct a Vernier scale of RF=1/500 to show decameters, metres and decimeters, and to measure up to 4 decametres. Show the lengths of 0.0393 km and 0.0001 km on it.

(b) A stone is thrown from a 7 m high building, and at its highest flight the stone just crosses a 14 m high palm tree. Trace the path of the stone till it touches the ground. The distance between the building and the palm tree is 4 m. [15]

2. The front view of a line PQ measures 70 mm and makes an angle of 30^0 with the reference line. P is in the H.P. and the V.T of the line is 15 mm below the H.P. The line is inclined at 45^0 to the V.P. Draw its projections and find its true length, inclination with the H.P, and locate the H.T. [15]

3. Draw the projections of a cone, with a 50 mm base diameter and a 70 mm long axis that is resting on a point of its base circle on the ground such that its axis is inclined at 30^0 to the H.P. and the top view of the axis is inclined at 45^0 to the V.P. [15]

4. A square prism having a base with a 40 mm side and a 60 mm long axis, stands on its base on the H.P. with its vertical faces equally inclined to V.P. A circular hole with 50 mm diameter is drilled centrally through the prism such that the axis of the hole is perpendicular to the V.P. Draw the development of the lateral surface of the prism. [15]

5. A cylinder with a 50 mm diameter base and a 70 mm height is resting on its base on the HP. It is intersected by a triangular prism of 35 mm sides whose axis is parallel to both the reference planes and is offset by 5 mm from the cylinder's axis. Draw the three views and show the curves of intersection. [15]

6. The frustum of a sphere with a 60 mm diameter and frustum circle with a 40 mm diameter is used as a paper weight. Draw its isometric projection. [15]

7. Draw the front view, top view and side view of the object whose isometric view is shown in the Figure 3 below (All dimensions are in mm). [15]

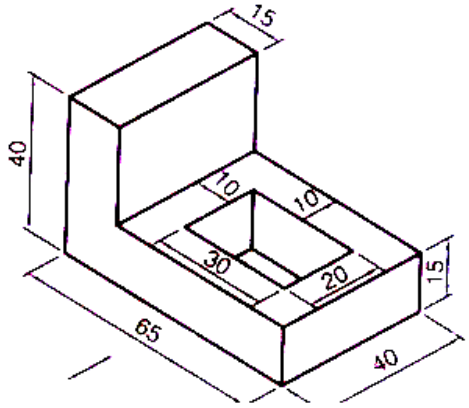


Figure 3

8. A rectangular plane with 60 mm and 40 mm sides is lying in the GP with the longer side parallel to and 15 mm behind the PP. The station point is 50 mm in front of the PP, 60 mm above GP, and lies in the CP passing through the centre of the object. Draw its perspective view. [15]

****