Code.No: 09A10291 | R09 | SET-2

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) Draw a Vernier scale of RF =1/5 to read decimeters, centimeters and millimeters, and to measure up to 6 decimeters. Show the lengths of 5.73 dm, 2.99 dm and 0.49 dm on it.

(b) In a triangle ABC, AB, AC, and BC are 100 mm, 55 mm and 70 mm respectively. Draw an ellipse and that A and B are foci, and C is a point on the curve. Find directrix and eccentricity of ellipse. [15]

2. The end point C of an 80 mm long line CD is 15 mm above the H.P. and 10 mm in front of the V.P. The line is inclined at 30^0 to the H.P. and 45^0 to the V.P., and the other end point D lies in the second quadrant. Draw its projections and determine its traces. [15]

3. A pentagonal plane with a 35 mm side is resting on one of its edges in the H.P. with its surface perpendicular to the V.P. The corner opposite to the edge on which it is resting is 40 mm above the H.P. draw its projections. Also, project another front view on an A.V.P. which is inclined at 45^0 with the V.P. [15]

4. A pentagonal prism having a base with 30 mm side and 65 mm long axis, is resting on its base in the H.P. with a rectangular face parallel to the V.P. It is cut by a section plane perpendicular to the V.P., inclined at 30^0 with the H.P., and passing through a point on the axis, 25 mm from one of the bases. Draw the development of its lateral surface. [15]

5. A cylinder resting on its base on the H.P. is penetrated by another cylinder with their axes bisecting at right angles. Draw the projections of the combination and show the curves of intersection. Consider the vertical cylinder having a 60 mm base diameter while the penetrating cylinder has a 50 mm diameter. [15]

6. Draw an isometric projection of a frustum of the pentagonal pyramid with a 40 mm base side, 20 mm top side, and 35 mm height resting on its base in the H.P. [15]

7. Draw the front view, top view and side view of the object whose isometric view is shown in the Figure 2 below (All dimensions are in mm). [15]

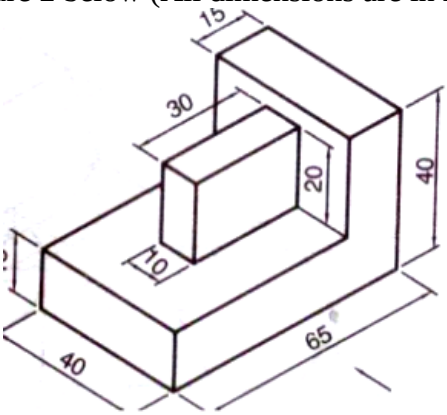


Figure 2

8. A square plane with a 60 mm side lies on the GP with the edge nearer to the observer lying in the PP. The station point is 50 mm in front of PP, 60 mm above GP, and lies in a CP which is 50 mm towards right of the centre of the object. Draw its perspective view. [15]

****