Roll No. | | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (2011 Onwards) (Sem.–1,2)

ENGINEERING DRAWING

Subject Code : BTME-102

Paper ID : [A1110]

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION - B & C. have FOUR questions each.**
3. **Attempt any FIVE questions from SECTION B & C carrying EIGHT marks each.**
4. **Select atleast TWO questions from SECTION - B & C.**

SECTION–A

1. Write briefly :

(a) What do you mean by conventions?

(b) Define a straight line.

(c) Draw a symbol of third angle projections.

(d) What are oblique solids?

(e) What is cutting plane line?

(f) What are different methods of development of surfaces?

(g) What is difference between a plane and a lamina?

(h) Define orthographic projections?

(i) How a point is determined in space?

(j) What are uses of diagonal scale?

SECTION-B

2. A straight line AB 50 mm long makes an angle of 30° to the HP. The end A is 12 mm above the HP and 15 mm in front of the VP. Draw the top view and front view of the line AB.

3. What is engineering drawing? Write about technical lettering as per the BIS codes?

4. Write short note on types of projections?

5. A vertical cylinder of 50 mm diameter and height 70 mm standing on its base on H.P, is completely penetrated by a horizontal cylinder of 35 mm diameter and 70 mm long such that their axes bisect each other at right angles and are parallel to V.P. Draw the curves of interpenetration in front view.

SECTION-C

6. A pentagon prism of 25 mm base edges and 50 mm long, resting on its base with an edge of base at 45° to the VP. The prism is cut by a section plane V.T. inclined at 30° to the HP and passes through a point 25 mm from the base along its axis. Develop its lateral surface of the truncated prism.

7. Draw the three views of a cube 30 mm side when it is resting on its base on HP with one of the base edges making an angle of 45° to the VP.

8. A square lamina ABCD of 25 mm side has its H.T. parallel to and 15 mm below xy line. It has no V.T. Draw its projections when all the sides are equally inclined to the H.P.

9. A cube of 40 mm edges is resting on its one of its faces on HP with a vertical face inclined to 30° to VP. It is cut by a section plane parallel to the VP and passes 15 mm away from the axis. Draw its top view and sectional front view.