

B. E. CONSTRUCTION ENGINEERING, FIRST YEAR, FIRST SEM. SUPPLEMENTARY EXAMINATION - 2018

Subject : ENGINEERING DRAWING - I

Time : Four hours

Full Marks : 100

Answer Question no.6 and any four questions from the rest. For neatness – 4 marks.

1. Draw an involute of a circle of 42 mm diameter. Also, draw a normal and a tangent at any point on the curve. 18
2. A distance of 1 cm on a machine part has to be represented by a line 3 cm on the drawing. Draw a diagonal scale showing divisions of 0.01 cm and capable of measuring up to 5 cm. Mark a distance of 3.74 cm on the scale. 18
3. A line AB, 50 mm long, is inclined at 30° with HP and 45° with VP. The end A is 10 mm above HP and 15 mm in front of VP. Draw the projections. Show the apparent angles on the drawing by measuring. 18
4. Draw the projections of a regular hexagonal lamina of 30 mm side, having one of its sides in the HP and inclined at 60° to the VP, and its surface making an angle of 45° with the HP. 18
5. A right regular hexagonal prism, edge of base 25mm and height 70mm, rests on HP on one of its base edges, such that the base edge is perpendicular to VP, the axis is parallel to VP and inclined at 45° to HP. Draw the projections of the prism. 18
6. Fig -1 shows a pictorial view of a machine part. Draw (a) Front view, (b) Top view, (c) Side view from the right. 8+8+8
7. Fig - 2 shows Plan and Elevation of a machine part. Draw the Isometric view of the machine part. 18

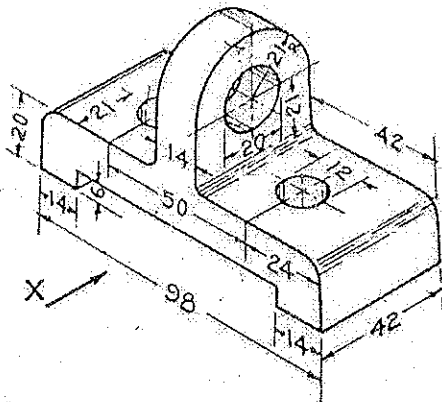


Fig - 1

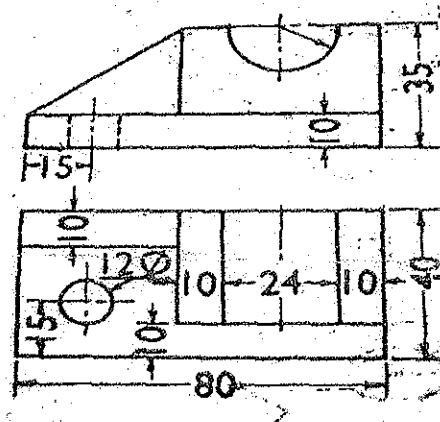


Fig - 2