

CBSE Class XI
Last year papers Engineering Graphic
Questions Paper 2017 SA-1

General Instructions:

- Use both sides of the drawing sheet, if necessary.
- Missing and mismatching dimensions, if any, may be suitably assumed.
- Follow the SP : 46-2003 codes (with First Angle Method of Projection).

1. Construct a triangle ABC, having its side BC=45 mm, Angle A = 65° and another side CA=50mm. (5)
2. Draw an exterior common tangent to two unequal circles of 40mm and 28mm diameter respectively when their centres are 55 mm apart. (5)
3. Construct a rectangle having each of its diagonals as 50 mm and the angle between them is 45° . (5)
4. Divide a straight line of 70 mm and show $\frac{3}{8}$ part of its as PQ. (4)
5. Draw the front view and Top view of a vertical line(60mm) touching horizontal plane but 35 mm away from the vertical plane. (6)
6. A vertical regular pentagon (side 35 mm) is kept on one of its corner of H.P. with one side perpendicular to H.P. Draw its Front view and Top view. (9)
7. Draw the Front view and Top view of a right regular hexagonal prism (side=28 mm, axis=65mm) resting on its rectangular face on H.P. with hexagonal bases parallel to V.P. (12)
8. A square pyramid (side 42 mm, axis 65 mm) resting on one of its base side which is perpendicular to V.P. and its axis makes an angle of 45° with the ground towards the left. Draw its Front view and Top view. (14)