BT105
ENGINEERING GRAPHICS

1 (a) Write two differences between lines & point.
   (b) Point A is 30 mm below HP & 45 mm behind VP. Draw projection
   (c) A line AB of 100 mm length is inclined at an angle 30^0 to the H.P. nd parallel to V.P. The point A is 15 mm above H.P. and 20 mm infront of V.P. Draw the front view & top view of the line.
   (d) The top view of line AB, 70 mm long measures 55 mm and front view measures 45 mm. Its end A is 10 mm from H.P. and 15 mm from V.P. Draw the projections of the line and determine its inclination with the H.P. and V.P. Also draw its traces.
   (e) A hexagonal lamina of 24 mm side has its surface inclined at 30° to H.P. It's one side is lying on the H.P. and inclined at 45° to V.P. Draw its projections.

2 (a) Draw a pentagonal pyramid of base side 25 mm & height 65 mm long.
   (b) What is section of solid and give an example by drawing
   (c) A cone base 50 mm dia and axis 60 mm long rests with its base on H.P. A section plane plane perpendicular to V.P. and inclined at 45^0 to H.P. bisect the axis of the cone. Draw the development of surface of the remaining portion.

   (d) A square prism, with a base side 45 mm and an axis length 90 mm, is resting on a longer edge on the H.P. A rectangular face through that edge is inclined at 30° to the H.P. The axis of the prism is perpendicular to the V.P. an A.V.P. inclined at 70° to the V.P. and passing through the midpoint of the axis cuts the prism. Draw the top view, sectional front view of the prism

   (e) A pentagonal pyramid with 25 mm side base and 65 mm height has one of its slant faces on the horizontal plane and the edge of the base contained by that slant face makes an angle of 25° to the V.P. Draw the projections of the pyramid.

3 (a) what is isometric projection.
   (b) Write different types of projection.
   (c) Write two differences between orthographic projection & isometric projection.
   (d)) Draw the isometric projection of the frustum of a cone of base diameter 50 mm, top diameter 25 mm, and height 60 mm.

   (e) A cube 25 mm edge is placed centrally on the top of another square block 40 mm edge and 15 mm thick. Draw the isometric drawing of the two solids.

4 (a) What is CAD?
   (b) Write two advantage & disadvantage of CAD?
   (c) Write about three edit command & three utility commands.
   (d) Name the different softwares used in CAD.

   (e) Write two methods of drawing a circle in Auto CAD.