## MLR15

# **MLR INSTITUTE OF TECHNOLOGY**

(An Autonomous Institution) B.Tech I Year I Sem Examinations , January-2016

## **ENGINEERING DRAWING**

(Electronics and Communication Engineering)

Time : 3 hours

Max.Marks:75

Draw an ellipse by concentric circle's method, given the major and minor axes as 80 mm and 50 mm respectively.

(OR)

 A circle of 45 mm diameter rolls along a straight line without slipping. Draw the curve traced out by a point P on the circumference for complete revolution of the circle. Name the curve.

15M

 A straight line AB, 55 mm long makes an angle of 30° to the H.P. and 45° V.P. The end A is 12 mm in front of V.P. and 15 mm above H.P. Draw the projections of the line AB.

15M

### (OR)

4. A room is 10 m long, 6 m wide and 4m high. An electric light hangs in the centre of the room by a wire 1.2 m long. The switch is situated in one corner of the room and 1.8 m above the floor level. Draw the top view and front view of the room and find the shortest distance of the switch from the light.

15M

A hexagonal prism, base edge 20 mm and height 50mm, is resting on an edge of its base on H.P. in such a way that the base makes an angle of 45° with H.P. Draw the projections of the prism.

(OR)

6. Draw the projections of circular disc 80 mm diameter lies in a plane inclined at 45° to the H.P. and (a) the top view of the diameter making an angle of 30° with the V.P.
(b) the diameter making an angle of 30° with the V.P.

 A right circular cone, diameter of base 40 mm and height 65 mm rests on its flat end on H.P. The front view is cut by a plane passing through the mid-height point of the cone at an angle of 45° to H.P. Draw the development of the truncated cone. 15M

#### (OR)

- 8. A hexagonal prism of 25 mm edges and 50 mm long stands on its base with one base edge inclined at an angle of 40° to V.P. It is cut by a section plane inclined at 35° to H.P. which passes through the point 35 mm from the base along its axis. Develop the lateral surface of the truncated prism.
- A cube of 30 mm sides rests on the top of a cylindrical slab of 60 mm diameter and 20 mm thick. The axes of the solids are in the same straight line. Draw an isometric projection of the solid.
   15M

#### (OR)

10. Draw the front view, top view and left side view of a given object by first angle projection method.15M



All dimensions are in mm