HTNO										

Code No: A10305

MLR15

MLR INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)

I B.Tech II Semester advanced supplementary/improvement Examinations- July-2016

ENGINEERING DRAWING

(Common to CSE, IT, AERO)

Time: 3 hours Max.Marks :75

1. Construct a cycloid having a rolling circle diameter as 50 mm for one revolution. Draw a normal and tangent to the curve at a point 35 mm above the directing line. 15 M

OR

2. Inscribe an ellipse in a parallelogram having sides 150 mm and 100 mm long and an included angle of 120^0.

15 M

3. Two points A and B are in the H.P. The point A is 30 mm in front of the V.P., while B is behind the V.P. The distance between their projectors is 75 mm and the line joining their top views makes an angle of 45^0 with XY. Find the distance of the point B from the V.P. 15 M

OR

4. A 70 mm long line PQ is inclined at 30^0 to the HP. The end P is 15mm in front of the V.P. and 25 mm above the H.P. The front view of the line measures 45 mm. Draw the projections of the line PQ and determine its true angle of inclination with the V.P. And also find its traces. 15M

5. Draw the projections of a regular pentagon of 40 mm side, having its surface inclined at 30^0 to the H.P. and a side parallel to the H.P. and inclined at an angle of 60^0 to the V.P. 15 M

OR

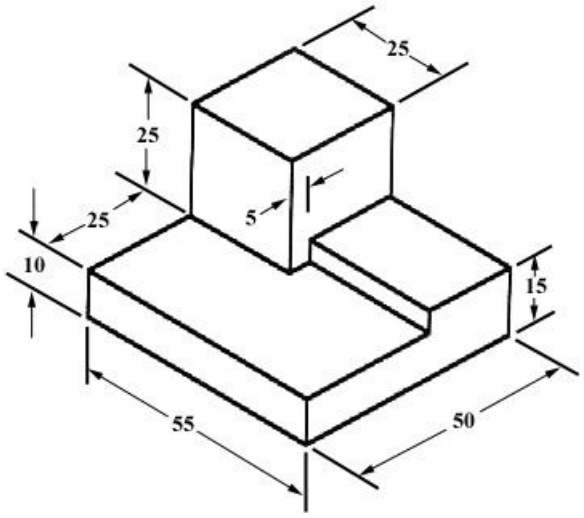
6. Draw the projections of a pentagonal prism, base 25mm side and axis 50 mm long, resting on one of its rectangular faces on the H.P., with the axis inclined at 45^0 to the V.P. 15 M

7. Draw the projections of a cone resting on the ground on its base and show on them, the shortest path by which a point P, starting from a point on the circumference of the base and moving around the cone will return to the same point. Base of cone 61 mm diameter; axis 75 mm long. 15 M

OR

8. A hexagonal pyramid of base side 30 mm and height 70 mm rests vertically on HP with one of the base sides parallel to V.P. Draw the development of the lateral surface of the hexagonal pyramid. 15 M

9. The pictorial view of an object is shown in the following fig. Draw its three views. All the dimensions are in mm. 15 M



OR

10. A sphere of diameter 60 mm is placed centrally on a pentagonal prism of base edge 30 mm and height 20 mm. One of the base edges of the pentagonal prism is perpendicular to the V.P. The common axes are perpendicular to the H.P. Draw the isometric projection of the combination of solids. 15 M