

Code: EC2T6

**I B.Tech - II Semester – Regular/Supplementary Examinations–
May 2017**

**ENGINEERING DRAWING
(ELECTRONICS & COMMUNICATION ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Answer any *FIVE* questions. All questions carry equal marks

1. a) Draw ellipse by Oblong method, for a parallelogram of 100 mm and 70 mm long sides with included angle of 75° . Inscribe Ellipse in it. 7 M
- b) AGNI-I fired in air attains 100 m height and covers a horizontal distance of 150 m on the ground. Draw the path of the AGNI-I (projectile). 7 M
2. a) A motor cyclist is moving over the curved bridge. Draw the locus of the point on the motor cycle tyre, when the wheel diameter is 40 mm and curved bridge radius is 80 mm for one complete revolution of the wheel. 7 M
- b) The distance between Delhi and Agra is 200 km. In a railway map it is represented by a line 5 cm long. Find its R.F. Draw a diagonal scale to show single km. And maximum 600 km. Indicate on it following distances. 7 M

(i) 222 km (ii) 336 km (iii) 459 km and (iv) 569 km.

3. a) A point A is 15 mm above the HP and 20 mm in front of the VP. Another point B is 25 mm behind VP and 40 mm below HP. Draw the projections of A and B, keeping the distances between the projectors equal to 90 mm. Draw straight line joining their top views, the front views. 6 M

b) The Top view of a line is 65 mm long and is inclined at 30° to the reference line. One end is 20 mm above HP and 10 mm in front of VP. The other end is 60 mm above HP and is in front of VP. Draw the projections; determine the true length of the line and its true inclinations to HP and VP. 8 M

4. A $30^{\circ} - 60^{\circ}$ set square of longest side 100 mm long is in VP and its surface 45° inclined to VP. One end of longest side is 10 mm and other end is 35 mm above HP. Draw its projections. 14 M

5. A hexagonal pyramid base 25 mm side and axis 60 mm long has one of its slant edge on HP such that two of its triangular faces containing the slant edge on which it rests are equally inclined to HP. The top view of the axis appears to be inclined at 40° to VP. Draw its projections when its base is nearer to the observer than its apex. 14 M

6. A pentagonal pyramid, base 30 mm side & axis 65 mm long, has its base horizontal & an edge of the base parallel to the V.P. A horizontal section plane cuts it at a distance of 25 mm above the base. Draw the front view & sectional top view.

14 M

7. Draw the isometric projection of a sphere of diameter 50 mm resting on the top of a cube of side 60 mm.

14 M

8. Draw the Orthographic views (FV, TV & SV) to the below mentioned diagram.

14 M

