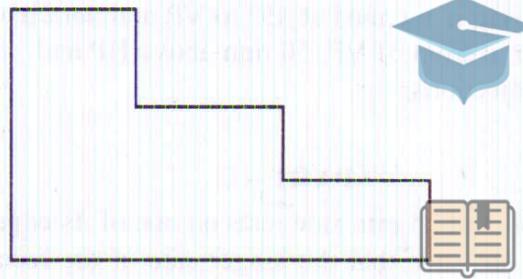


2586**Code : 15ME12D**Register
Number

--	--	--	--	--	--	--	--

I Semester Diploma Examination, Nov./Dec. 2015**ENGINEERING GRAPHICS – I****Time : 4 Hours]****[Max. Marks : 100****Note :** (i) Part – A is *compulsory*.(ii) Answer any **two** full questions each from Part – B, C and D.**PART – A****BETA CONSOLE**

1. Copy the given sketch to 1 : 1 scale and dimension adopting progressive system of dimensioning.

Diploma - [All Branches] **10**

Beta Console Education



Diploma Question Papers [2015-19]

Beta Console Education

**PART – B**

2. Draw a rectangular hyperbola given a point P on it at a distance 40 mm and 30 mm from two asymptotes. **15**

3. Draw an ellipse by rectangle method taking major axis 100 mm and minor axis 70 mm long. **15**

4. A circle of 50 mm diameter rolls on a line. A point on the circumference of the circle is in contact with the line in the beginning and after one complete revolution. Draw the cycloidal of the point. Draw a tangent and normal at any point on the curve. **15**

[Turn over

PART – C

5. (a) Draw the three principal views of a point P lying 50 mm behind VP, 60 mm below HP and 40 mm behind the right profile plane. 7
 (b) Draw the projections of the following points on a common reference line. Take 30 mm distance between the projector. 8
 (i) A – 35 mm above HP and 25 mm in front of VP.
 (ii) B – on both HP and VP.
 (iii) C – 50 mm below HP and 25 mm behind VP.
 (iv) D – 45 mm below HP and 20 mm in front of VP.
6. A line AB measuring 80 mm has its end A 15 mm in front of VP and 20 mm above HP and the other end B is 60 mm in front of VP and 50 mm above HP. Draw the projections of the line and find the inclinations of the line with both the reference planes of projection. 15
7. (a) Draw the three principal views of a line 80 mm long when it is placed parallel to both HP and VP. One of the ends of the line 50 mm above HP, 70 mm in front of VP and 40 mm in front of right PP. 7
 Diploma - [All Branches]
 (b) A line 80 mm long is inclined at 45° to VP and parallel to HP. The end nearer to VP is 40 mm in front of VP, 50 mm above HP and 110 mm in front of right PP. Draw its projections. 8

PART – D

Diploma Question Papers [2015-19]

8. A square lamina ABCD of 25 mm side rests on one of its edges such that the surface is inclined at 50° to HP such that the longer side of the rectangle being parallel to both HP and VP. Draw the projections. 15
9. A hexagonal lamina of sides 30 mm rests on one of its corner on HP. The lamina makes 45° to HP and the diagonal passing through the corner on which it rest appears to be inclined at 30° to VP. Draw its projections. 15
10. A circular lamina of 50 mm diameter is standing with one of its point on HP and the lamina inclined at 45° to HP. The diameter at right angles to the diameter which is passing through the point on which the lamina rest is parallel to VP. Draw its front view and top view. 15