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Code : 15CE12D

Register Number | | | | | | | | | | |

I Semester Diploma Examination, Oct./Nov.-2019

ENGINEERING DRAWING – I

Time : 3 Hours] **[Max. Marks : 100**

Note : Answer any **four** questions from each Section – **A & B.**

SECTION – A

1. Print the following statement in single stroke vertical letters of height 21 mm. **10**

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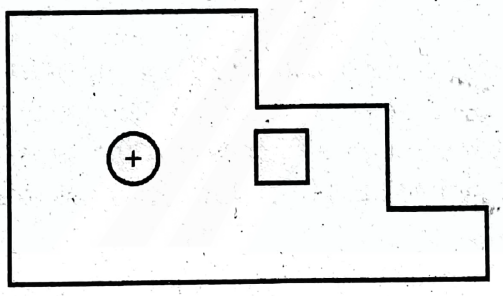
2. Copy the given sketch to 2 : 1 scale and dimension adopting unidirectional system with combined dimensioning method.



3. Draw a common external tangent to two circles of radius 40 mm and 20 mm whose centres are 90 mm apart. **10**

4. Inscribe 3 equal circles in a regular hexagon of side 50 mm so as to touch two sides and two adjacent circles. **10**

5. Construct a diagonal scale of R.F 1 : 20 showing divisions of 0.01 m and capable of measuring 3 meters. Mark a distance of 2.37 m and 1.17 m on it. **10**

6. A point P is 35 mm infront of VP, 45 mm above HP and 30 mm infront of left PP. Draw the three principle views of the point. **10**

[Turn over

SECTION – B

7. A stone as thrown from a ground level reaches a maximum height of 50 meters and falls on the ground at a distance of 120 m from the point of projection. Trace the path of the stone in space. Select a scale of 1 : 1000. **15**

8. Draw the projection of line 80 mm long placed parallel to HP and is inclined at 45° to VP. The end nearer to VP is 30 mm infront of VP, 60 mm above HP and 100 mm infront of right picture plane. **15**

9. A line AB has its end 'A' is 15 mm above HP and 10 mm infront of VP. The end 'B' is 55 mm above HP and line is inclined at 30° to HP. The distance between the end projectors of the line when measured parallel to line of intersection of HP and VP is 50 mm. Draw the projections of the line and find its inclination with VP. **15**

10. A circular lamina of 60 mm diameter rests on HP such that the surface of the Lamina is inclined at 30° to HP. The diameter through the point on which the lamina rests on HP; appears to be inclined at 30° to the VP in the top view. Draw the projections. **15**

11. A hexagonal lamina of 25 mm sides rests on HP an one of its sides. The side which is on HP is perpendicular to VP and the surface of the lamina is inclined to HP at 45°. The lamina is then rotated through 90°, such that the side on HP is parallel to VP, while the surface is still inclined to HP at 45°. Draw the front view and top view of the lamina in its final positon. **15**

12. An equilateral triangular lamina of 40 mm side lies with one of its edges on HP such that the surface of one lamina is inclined to the HP at 60°. The edge on which it rests is inclined to the VP at 60°. Draw the projections. **15**
