CBCS Scheme

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17CED14/24

First/Second Semester B.E. Degree Examination, December 2018

COMPUTER AIDED ENGINEERING DRAWING

Time: 3 Hours **(COMMON TO ALL BRANCHES)** Max. Marks: 100

Note: *1. Answer three full questions. 2. Use A4 sheets supplied.*
3. Draw to actual scale. 4. Missing data, if any, may be assumed suitably.

1. **a.** A point 'A' is 30 mm in front of VP and 40 mm above HP. Another point 'B' is 20 mm behind VP and 35 mm below HP. The horizontal distance between the points measured parallel to XY line is 60 mm. Draw the three projections of the points. **10 Marks**

   b. A line AB has its end A 20 mm above the HP and 15 mm in front of the VP. The other end B is 60 mm above the HP and 45 mm in front of VP. The distance between end projectors is 70 mm. Draw its projections. Determine the apparent lengths and true inclinations. **20 Marks**

OR

1. A pentagonal lamina of edges 25 mm is resting on HP with one of its corners such that the edge opposite to this corner is 20 mm above HP and makes an angle of 45° with VP. Draw the top and front views of the plane lamina in this position. Determine the inclination of the lamina with HP. **30 Marks**

2. A square pyramid 35 mm sides of base and 60 mm axis length rests on HP on one of its slant triangular faces. Draw the projections of the pyramid when the axis appears to be inclined to VP at 45°. **40 Marks**

3. A regular pentagonal pyramid of side of base 35 mm and altitude 65 mm has its base on HP with a side of base perpendicular to VP. The pyramid is cut by a section plane which is perpendicular to the VP and inclined at 30° to HP. The cutting plane meets the axis of the pyramid at a point 30 mm below the vertex. Obtain the development of the remaining part of the pyramid. **30 Marks**

OR

3. A cone of base diameter 50 mm and height 40 mm is placed centrally on the top face of a square slab side 80 mm and height 20 mm. Draw the isometric projection of the combination. **30 Marks**

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