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15CED14/24

First/Second Semester B.E. Degree (CBCS) Examination

COMPUTER AIDED ENGINEERING DRAWING

Time: 3 Hours

(COMMON TO ALL BRANCHES)

Max. Marks:80

Note: 1. Answer three full questions

2. Use A4 sheets supplied

3. Draw to actual scale

4. Missing data, if any, may be suitably assumed

- 1. a.** A point is lying on HP, 20 mm behind VP and 25 mm in front of RPP. Draw its projections and name the side view. **10 Marks**

- b.** A line AB measuring 70 mm has its end A 15 mm in front of VP and 20 mm above HP and the other end B 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 the both the reference planes of projection **15 Marks**

OR

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

- 2.** A hexagonal pyramid 25mm side of base and 50mm axis length rest on HP on one of its slant edges. Draw the projections of pyramid when the axis is inclined at 45° with VP. Show all three views. **30 Marks**

- 3.** A regular pentagonal pyramid of side of base 35mm and altitude 65mm 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 VP and inclined at 30° to HP. The cutting plane meets the axis of the pyramid at a point 30mm below the apex. Draw the development of the remaining part of the pyramid. **25 Marks**

OR

- 3.** A regular pentagonal prism of base sides 30mm and axis 60 mm is mounted centrally over a cylindrical block of 80mm diameter and 25mm thick. Draw the isometric projection of the combined solids. **25 Marks**

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