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Question Paper Code: 51109

B.E. / B.Tech. DEGREE EXAMINATION, DECEMBER 2015

First Semester

Electrical and Electronics Engineering

15UME108 – ENGINEERING GRAPHICS

(Common to Electronics and Instrumentation Engineering, Mechanical Engineering,
Information Technology and Chemical Engineering)

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

(5 x 20 = 100 Marks)

1. (a) A line PF 65mm long has its end P , 15 mm above the HP and 15mm in front of the VP. It is inclined at 55° to the HP and 35° to the VP. Draw its projections. (20)

Or

- (b) A thin circular plate of 50 mm diameter is resting on HP on a point A in the circumference. Its plane is inclined at 50° to the HP and diameter AE in the top view is making an angle of 35° with VP. Draw the projection. (20)
2. (a) A pentagonal prism, base of side 30 mm and height 70 mm is resting on one of its base side on HP. Its axis is inclined at 50° to HP and parallel to VP. Draw its projections. (20)

Or

- (b) Draw the top, front, right side and left side views of a square pyramid of base of side 30 mm and altitude 40 mm when it is resting on the ground on its base with one of the edges of the base inclined at 60° to the VP. (20)

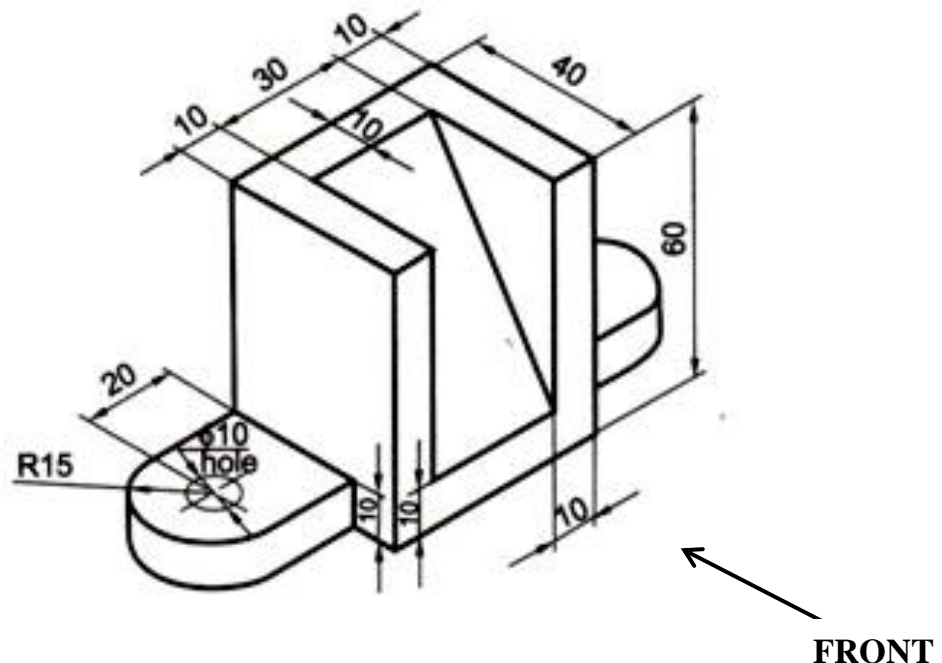
3. (a) A cube of side 25mm rests on the HP on one of its faces with a vertical face inclined at 35° to the VP. It is cut by a plane perpendicular to the VP and inclined at 35° to the HP and meeting the axis at 20mm above the HP. Draw the front view, sectional top view and the true shape of the section. (20)

Or

- (b) A cone of base diameter 60mm and height 70mm rests vertically on its base on the ground. A string is wound round the curved surface of the cone starting from left extreme point on the base and ending at the same point. Find the shortest length of the string required. Also trace the path of the string in the front and the top view. (20)
4. (a) A cone of base diameter 50mm and altitude 70mm is resting on its base on HP. It is cut by a plane inclined at 30° to HP and meets the axis 40mm from the base. Draw the isometric view of the truncated cone. (20)

Or

- (b) A pentagonal pyramid of base side 30mm and altitude 65mm is resting on its base on HP with its base side is perpendicular to VP. It is cut by a plane inclined at 30° to HP and meets the axis 30mm from the top. Draw the isometric view of the truncated pyramid. (20)
5. (a) Draw the front, top and right side views of the pictorial view as shown in the figure. (20)



Or

- (b) Draw the front, top and left side views of the pictorial view as shown in the figure. (20)

