Code No: 151AD

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech I Year I Semester Examinations, July - 2021
ENGINEERING GRAPHICS
(Electronics and Communication Engineering)

Time: 3 hours

Max. Marks: 75

Answer any three questions
All questions carry equal marks
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1.a) Construct a hyperbola, when the distance of the focus from the directrix is 70 mm and eccentricity is 4/3.

b) Construct a diagonal scale of representative fraction of 1/32 showing yards, feet and inches and to measure up to 6 yards. [15+10]

2. Construct a hypocycloid when the diameters of rolling and directing circles are 40 mm and 140 mm respectively. Draw a tangent to it at a point. [25]

3. A line PQ of 70 mm length is inclined at 30^0 to the horizontal plane and its end P is 10 mm above the horizontal plane and 15 mm in front of the vertical plane. When its front view measures 50 mm, determine its inclination with the vertical plane. [25]

4. A pentagonal prism of base 20 mm side and axis 50 mm long is resting on one of its rectangular faces on the ground. Draw its projections when the axis is inclined at 60^0 to the vertical plane. [25]
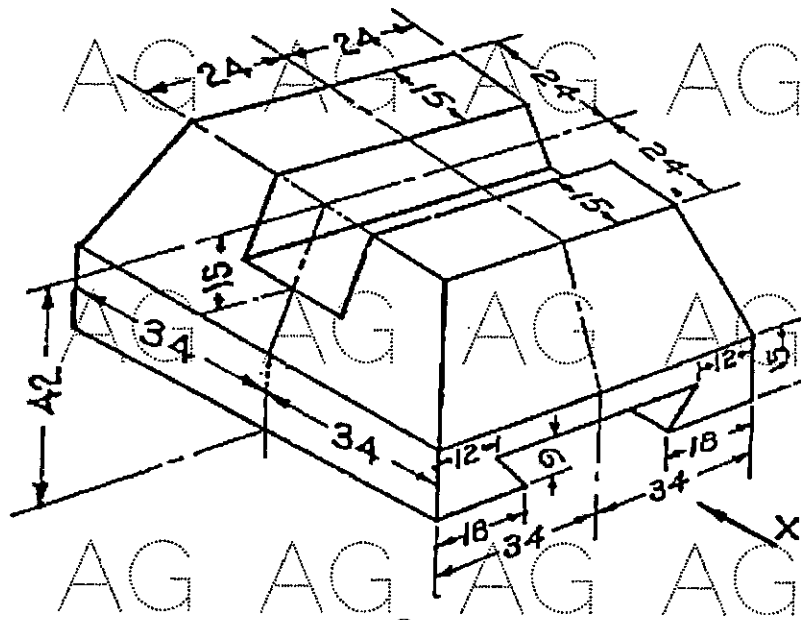
5. A circular hole of 25 mm diameter is cut through a vertical cylinder of 80 mm diameter such that the axis of the hole is horizontal and parallel to the vertical plane and 8 mm away from the axis of the cylinder. Draw the projections of the cylinder showing the holes in it. [25]

6. Draw the a) front view b) side view from left and c) top view to the full scale for the pictorial view shown in the figure. All dimensions are in mm. [25]

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