

Code No: 51015

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech I Year Examinations, July - 2021

ENGINEERING DRAWING

(Common to IT, AME)

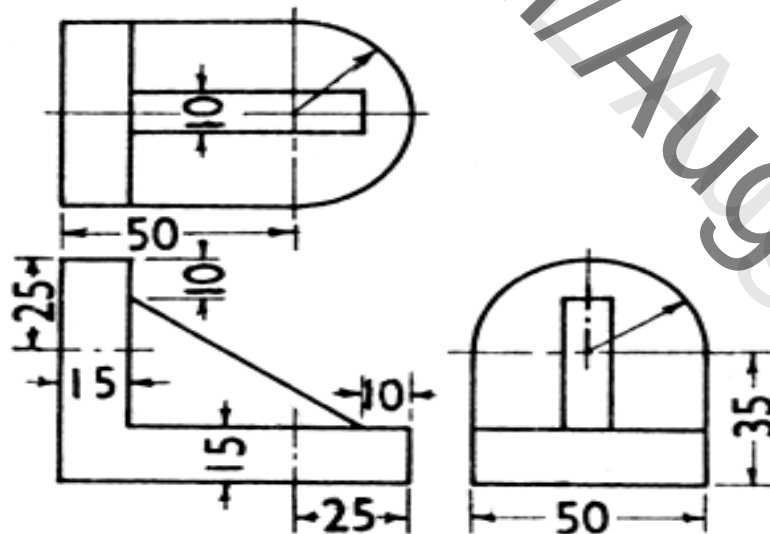
Time: 3 hours

Max. Marks: 75

Answer any three questions  
All questions carry equal marks

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- The distance between the end projectors of a line is 60. One end is 15 above H.P and 10 in front of V.P. Draw the projections and find the true length of the line. [25]
- Draw the projections of a line MN of true length 80 mm, situated in the 1<sup>st</sup> quadrant. The end M is in the HP and 30 mm in front of VP. The line is inclined at 30° to HP and 45° to VP. [25]
- A cone of base diameter 40 mm and altitude 70 mm rests on its base on the HP. It is cut by a plane perpendicular to the VP and parallel to one of the extreme generators, 15 mm away from it. Draw the sectional plan and the true shape of the section. [25]
- A cone diameter 50 mm and length of the axis 65 mm is resting on its base. It is penetrated by a horizontal cylinder of diameter 40 mm and length 70 mm. The axis of the cylinder is parallel to the VP, 25 mm above the base of the cone and 8 mm in front of the axis of the cone. Draw the projections showing the curves of intersection. [25]
- By using the following views shown in figure, draw the isometric view. All dimensions are in mm. [25]



- A cone, diameter of base 45 mm and height 50 mm is mounted centrally on the top of a square slab of thickness 10 mm and side 65 mm. Draw the isometric projection of the combined solid. [25]