

R09

Code No: 09A10391

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

B. Tech I Year Examinations, November/December-2013

ENGINEERING DRAWING

(Common to ME, MMT)

Time: 3 hours

Max. Marks: 75

Answer any five questions

All questions carry equal marks

1. An aircraft is shot at an angle of 45° to the horizontal from the ground level. It is hit at a maximum height of 255 m of the trajectory. Trace the path of the aircraft. Name the curve and draw a tangent and normal at any point on the curve. [15]
2. The end A of a line AB is in the HP and 15mm in front of the VP. The end B is 50mm behind the VP and 40mm below the HP. The distance between the end projectors is 50mm. Draw the projections of AB and determine its true length and true inclinations with the two planes. [15]
3. A hexagonal pyramid base 25 mm side and axis 55 mm long has one of its slant edges on the ground. A plane containing that edge and the axis is perpendicular to the H.P and inclined at 45° to the V.P. Draw its projections when the apex is nearer the V.P than the base. [15]
4. A cone of base diameter 50 mm and height 60 mm is resting on the ground on its base. A section plane perpendicular to both HP and VP cuts the cone at a distance of 8 mm from the axis of the cone. [15]
5. A vertical cylinder of 70 mm diameter is penetrated by another cylinder of the same size. The axis of the penetrating cylinder is parallel to both HP and VP and is 9mm away from the axis of the vertical cylinder. Draw the projections and show the curves of intersection. [15]
6. Draw the isometric view of a pentagonal pyramid with side of base 25 and axis 60 long. The pyramid is resting on its base on H.P, with an edge of the base (away from the observer) parallel to V.P. [15]

