Code.No: 09A12191 | R09 | SET-2

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
I B.TECH – REGULAR EXAMINATIONS JUNE - 2010
ENGINEERING DRAWING
(AERONAUTICAL ENGINEERING)

Time: 3hours **Max.Marks:75**

Answer any FIVE questions
All questions carry equal marks
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1.a) Inscribe a regular Heptagon in a circle of diameter 50mm.
b) The distance between Parry's Corner and Egmore is 2.5km. On inspection of road map, its equivalent distance measures 5cm. Draw a diagonal scale to read a minimum distance of 50m. Show on the scale, a distance of 6,350m. [8+7]

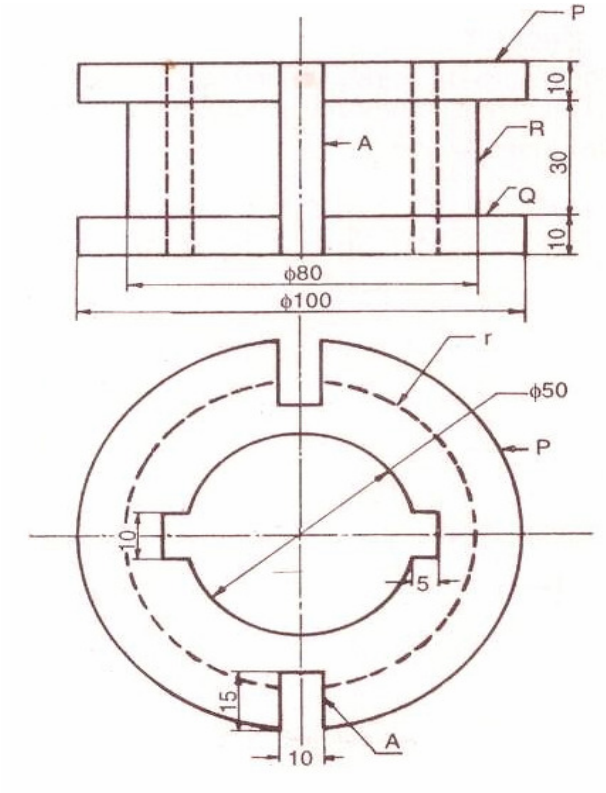
2. The end A of a line AB 130mm long is 55 mm in front of VP. The HT of the line is 40 mm in front of VP and VT is 50 mm above HP. The distance between VT and HT is 110mm. Draw the projections of the line AB and determine its inclinations with the reference planes. [15]

3. A thin 45^0 set-square, ABC is placed in the VP with its longest edge, AB (50mm) inclined at 30^0 to HP. Its surface is rotated about AB till it makes 40^0 with the VP. Draw the plane and elevation of the set-square in its final position. [15]

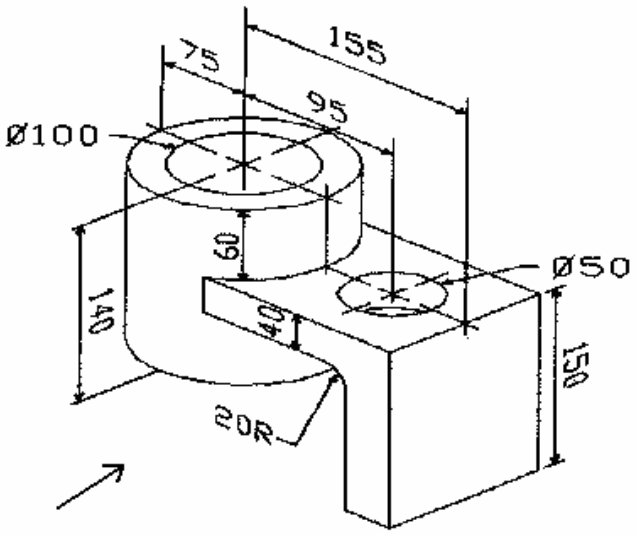
4. A cube of 50mm long edges is resting on the ground with a vertical face inclined at 30^0 to the VP. It is cut by a section plane, perpendicular to the VP, inclined at 30^0 to the HP and passing through a point on the axis, 38mm above the ground. Draw the sectional top view and development of the surface of the remaining portion of the cube. [15]

5. A cone penetrates a vertical cylinder of base diameter 60 mm and height 80 mm. The cone has its apex touching the ground and axis parallel to the VP. Its base has a diameter 120 mm and height 80 mm. The distance between the axes of the objects is 30 mm and the plane joining the axes of the objects is parallel to the VP. Draw the views of the objects showing the curves of interpenetration. [15]

6. Draw the isometric view of the object whose front and top views are given. [15]



7. Draw the front view, top view and left side view of the given isometric view. All dimensions are in mm. [15]



8. Draw the perspective view of a square pyramid of base 10mm side and 20mm height. The nearest edge of the base is parallel to and 30mm behind the picture plane. The station point is situated at a distance of 30mm from the picture plane and 60mm above the ground plane and 20mm to the apex of the cone. [15]

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