R13

Code No: 111AH

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech I Year Examinations, June – 2015

ENGINEERING DRAWING

(Common to CSE, MIE, PTE)

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

Answer any five questions

All questions carry equal marks

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1. Inscribe regular polygons of 3, 4, 5, 6, 7 and 8 sides in circle of 75 diameter. [15]

OR

2. On a building plan a line 10 cm long represents a distance of 5m. Construct a diagonal scale for the plan to read upto 6m, showing meters, decimeters and centimeters. Indicate scale the lengths 3.24 and 5.57m. [15]

3. The midpoint of a straight line AB is 60 mm above HP and 50 mm in front of VP. The line measures 80 mm long and inclined at 30^0 to HP and 45^0 to VP. Draw its projections. [15]

OR

4. Draw the projections of a rhombus having diagonals 120 and 60 long, the smaller diagonal of which is parallel to both the principal planes, while the other is inclined at 30^0 to HP. [15]

5. A tetrahedron of 75 mm long edges has one edge parallel to the HP. and inclined at 45^0 to the VP while a face containing that edge is vertical. Draw its projections. [15]

OR

6. A cylinder of 40 mm diameter, 60 mm height and having its axis vertical is cut by a section plane, perpendicular to the V.P., inclined at 45^0 to the HP and intersecting the axis 32 mm above the base. Draw its front view, sectional top view, sectional side view and true shape of the section. [15]

7. Draw the development of the lateral surface of the part P of cylinder, the front view is shown in figure 1. All dimensions are in mm. [15]

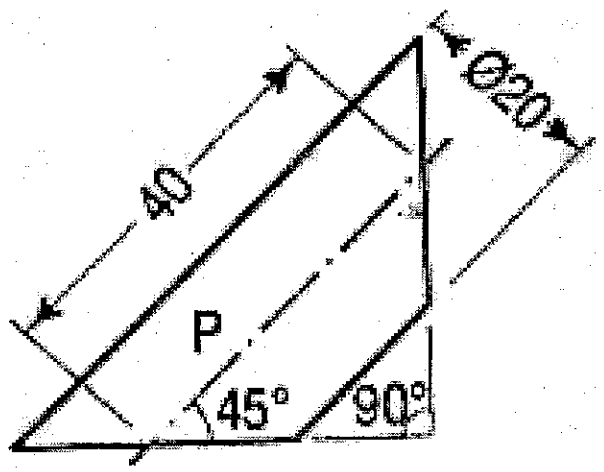

Figure: 1

OR

8. A vertical cone base 80 mm diameter and axis 110 mm long is penetrated by a horizontal cylinder, 45 mm diameter. The axis of the cylinder is 25 mm above the base of the cone, is parallel to the VP and is 10 mm away from the axis of the cone. Draw the projections of the solids showing the curves of intersection. [15]

9. Draw the isometric view of the casting shown in following figure 2. All dimensions are in mm. [15]

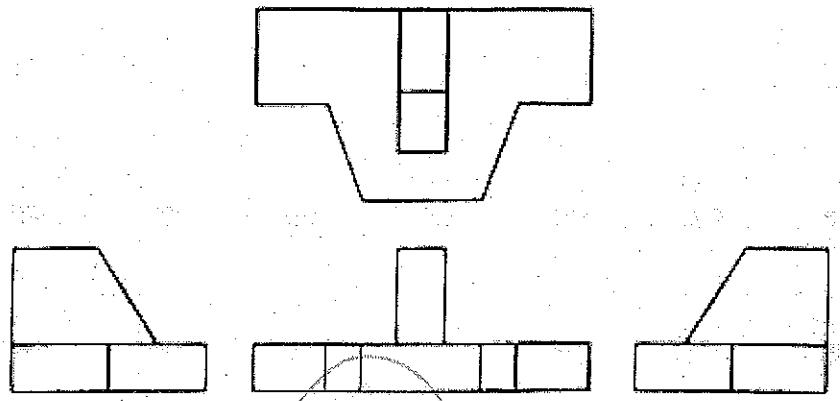

Figure: 2

OR

10. Draw the following views of the object shown in figure 3. All dimensions are in mm.
a) Front view b) side view from left c) top view. [15]

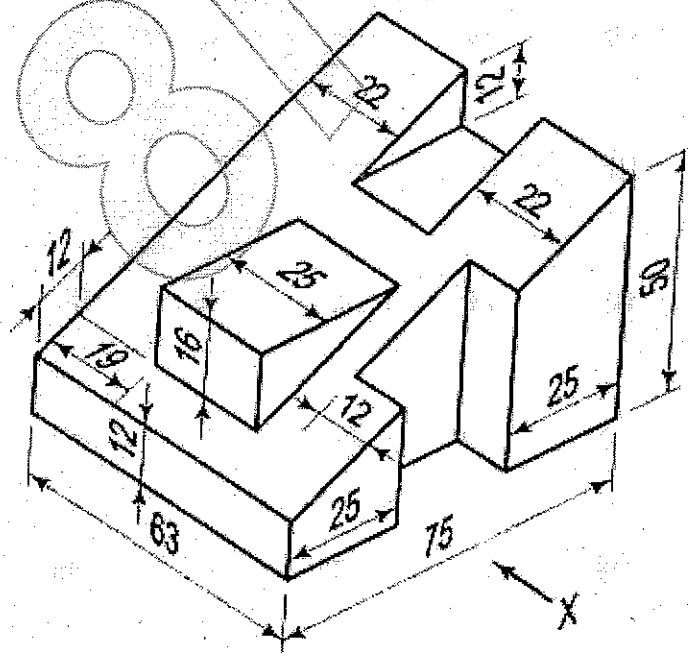

Figure: 3

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