AR13 **SET 02**

Code: 13ME1001

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
I B. Tech II Semester Regular Examinations, August-2014
ENGINEERING DRAWING
(Electrical and Electronics Engineering)

Time: 3 hours **Max Marks: 70**

PART-A

Answer all questions **[10X1=10M]**

1. a) What is reduced scale drawing?
   b) Define Parabola.
   c) What is conic section?
   d) Draw the symbol of first angle projection.
   e) What is oblique plane?
   f) When a line is perpendicular to H.P. then the front view of the line with respect to xy is ------
   g) What is i) Prism and ii) Pyramid?
   h) What is truncation of solid?
   i) What is isometric projection?
   j) What is the difference between isometric drawing and isometric projection?

PART- B

Answer one question from each unit **[5X12=60M]**

Unit - I

2. Construct a scale to be used on a map, in which 1 cm = 40 m. The scale should read in meters and upto 500 m. Mark a distance of 456 m on it.

(OR)

3. A lawn of ground is in the shape of rectangle 110 mmx50mm. Inscribe an elliptical lawn in it.

Unit - II

4. a) A point A is 40 mm above H.P. and 25 mm in front of V.P. Another point B is 20 mm behind V.P. and 30 mm below H.P. The horizontal distance between the points is 100 mm. Draw the projections of the points A and B and join their front views and top views.
   b) A line, of 100 mm long, is parallel to and 30 mm above H.P. Its two ends are 25 mm and 50 mm infront of V.P. respectively. Find its inclination with V.P.

(OR)

5. a) A vertical line AB, 75 mm long, has its end A in the H.P and 25 mm infront of V.P. Draw its projections.
   b) The front view of a line, inclined at 30^0 to the V.P. is 65 mm long. Draw the projections of the line, when it is parallel to and 40 mm above the H.P., its one end being 30 mm infront of the V.P.

Unit – III

6. A regular hexagon of 40 mm side has a corner in the H.P. Its surface is perpendicular to V.P and inclined at 45^0 to the H.P. Draw its three views.

(OR)

7. A circular plate of 60 mm diameter has a hexagonal hole of 20 mm side, centrally punched. Draw the projections of the plate, resting on H.P. on a point, with its surface inclined at 30^0 to H.P. Any two sides of the hexagonal hole are perpendicular to V.P. Draw the projections of the plate.

Unit - IV

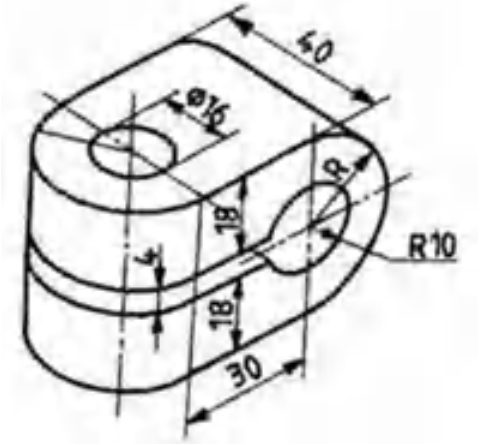
8. Draw the projections of a hexagonal prism of base 25 mm side and axis 60 mm long, is resting on one of its corners of the base on H.P. The axis of the solid is inclined at 45^0 to the H.P. and parallel to V.P.

(OR)

9. A pentagonal pyramid, with side of base 25 mm and axis 70 mm long, has a corner of the base on H.P. Its axis is inclined at 30^0 to H.P. and parallel to V.P. Draw the top and front views.

Unit - V

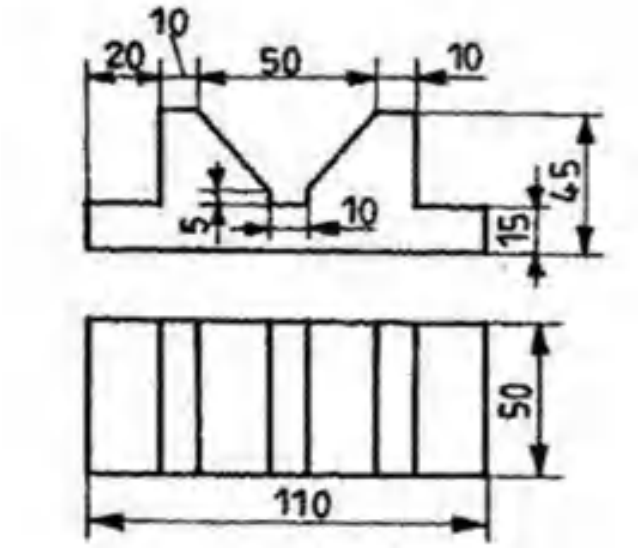
10. Draw the front and top views of the block shown in figure below.



All dimensions are in mm

(OR)

11. Draw the isometric projection of the block whose orthographic projections are shown in figure below.



All dimensions are in mm

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