

Roll No.

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B. Tech. (Sem. – 1st/2nd)**ENGINEERING DRAWING****SUBJECT CODE : ME – 102 (2004-10 Batch)****Paper ID : [A0125]****Time : 03 Hours****Maximum Marks : 60****Instruction to Candidates:**

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Five** questions from Section – B & C.
- 3) Select at least **Two** questions from Section – B & C.

Section – A**(2 marks each)**

- Q1)** a) Draw the symbol for Ist and IIIrd angle projection.
 b) Show the Aligned system of dimensioning with the help of a suitable sketch.
 c) What is meant by Representative Factor (RF) give some suitable example?
 d) What is a sectional view? Why sectional views are used in Drawing.
 e) What is the difference between an isometric view and an isometric projection?
 f) What is a Profile plane and what is its utility?
 g) What is meant by trace of a line? Draw the trace of a line when it is parallel to VP and inclined to HP.
 h) What are solids of revolution? Name them and how they are generated.
 i) Draw the frustum of a cone.
 j) List the various methods of Development and explain the parallel line method.

Section – B**(8 marks each)**

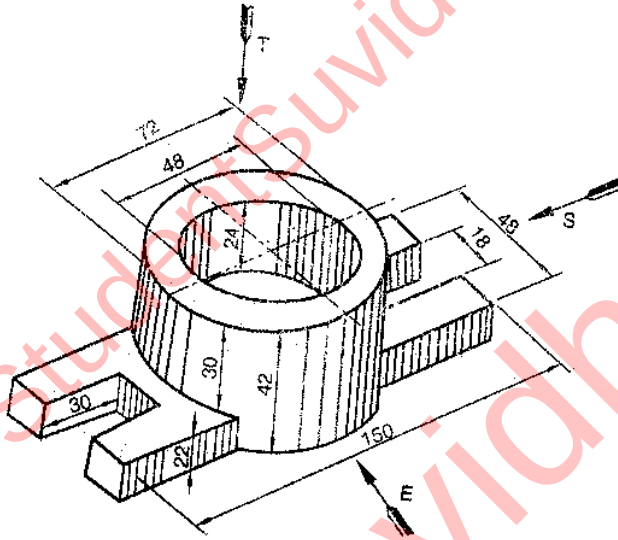
- Q2)** The distance between two cities A & B is 300 kilometers. Its equivalent distance on the map measures only 6 centimeters. What is the R.F. Further draw the diagonal scale to show hundreds of kilometers, tens of kilometers and kilometers. Indicate a distance of 313 kilometers on the scale.
- Q3)** A point P is 25 mm above HP and its shortest distance from x y is 50 mm. The point P lies in Ist quadrant, draw its projection.
- Q4)** A straight line AB, 60 mm long makes an angle of 30° to HP and 45° to VP. The end A is 15 mm in front of VP and 20 mm above HP. Draw its projections.
- Q5)** A hexagonal pyramid, side of base 25 mm and axis 50 mm long is resting on an edge of its base on the HP with its axis inclined at 30° to HP and parallel to VP. Draw its projections.

Section – C**(8 marks each)**

- Q6)** A hexagonal pyramid of base side 25 mm and height 50 mm is resting on a horizontal plane. Draw the isometric view of the pyramid.

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- Q7)** A pentagonal prism of 25 mm base edges and 50 mm long is resting on its base with an edge of base inclined at 45° to VP. The prism is cut by a sectional plane inclined at 30° to HP and passes through a point 25 mm from the base along its axis. Develop the lateral surface of the truncated prism.
- Q8)** Draw the front view, top view and right side view in the directions as shown in the figure below.



- Q9)** Draw the development of a sphere of 40 mm dia by Zore method.
