Roll No. ....

Total No. of Questions : 09]   [Total No. of Pages : 02

B. Tech. (Sem. – 1st/2nd)
ENGINEERING DRAWING
<u>**SUBJECT CODE**</u> **: ME – 102 (2004-10 Batch)**
<u>**Paper ID**</u> **: [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)

   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 gousated.
   i) Draw the frustom of a cone.
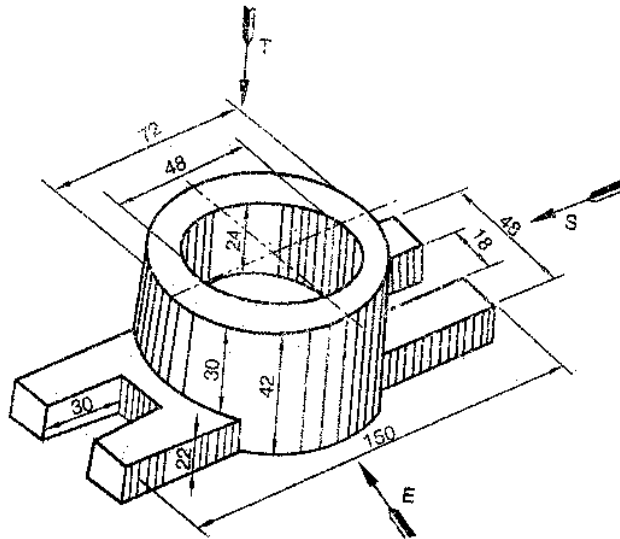   j) List the various methods of Development and explain the parallel line method.

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 a bore 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.

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.

⌘⌘⌘