## I B. Tech II Semester Supplementary Examinations, December - 2020 ENGINEERING DRAWING

SET-1

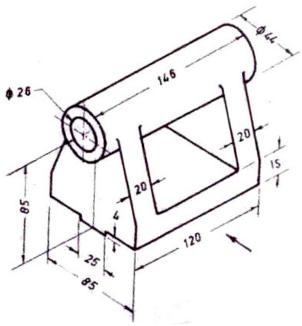
(Com. to All Branches)

Time: 3 hours Max. Marks: 75

## Answer any **FIVE** Questions All Questions carry **Equal** Marks

- 1. a) Two fixed points A and B are 100mm apart. Trace the complete path of a point P (8M) moving in the same plane as that of A and B in such a way that, the sum of its distances from A and B is always the same and equal to 125 mm.
  - b) The actual length of 500 m is represented by a line of 15 cm on a drawing. Construct (7M) a vernier scale to read upto 600 m. Mark on the scale a length of 549m.
- 2. a) A point A is 20mm above HP and 30mm in front of VP. Another point B is 35mm below HP and 45mm behind VP. Draw the projections of these points taking the distance between the end projectors as 80mm. Also find the length of the line joining their plans and elevations.
  - b) The front view of line inclined at 30° to VP is 65mm long. Draw the projections of a line, when it is parallel to and 40mm above HP. and one end being 20mm in front of VP.
- 3. Line CD is in the second quadrant and has  $55^0$  inclinations with HP, while the front view has  $30^0$  inclinations with xy line and 60 mm length. If the end C is 12 mm above HP and the end D is 60 mm behind VP, draw its projections.
- 4. a) Draw the projections of a regular hexagonal lamina of 30mm side resting on one of its base edges on AP with its plane perpendicular to HP and inclined at 45° to VP.
  - b) A regular pentagon of 30mm side has one side on the ground and its plane is inclined (7M) at  $45^{\circ}$  to HP and perpendicular to VP. Draw the projections.
- 5. a) Draw the projections of a pentagonal pyramid, base 30 mm edge and axis 50mm (8M) long, having its base on the HP. and an edge of the base parallel to the VP.
  - b) A square pyramid, base 40mm side and axis 65mm, long has its base in the V.P. One edge of the base is inclined at 30° to the H.P. and a corner contained by that edge is on the H.P. Draw its Projections.
- 6. Draw the projections of a square prism of side of base 30mm and axis 60mm long (15M) resting on one of its base edges in HP with its axis inclined at  $30^0$  to HP. and the top view of axis is  $45^0$  to VP.

7. Draw the front view, top view and left side view of the given pictorial projection. (15M) All dimensions are in mm.



8. Draw the isometric view of the object whose front and top views are given. (15M)

