

Reg No.: _____

Name : _____



Jyothi Engineering College(Autonomous)
 B. Tech Degree S2 (S) Examination, June 2026 (2025 Scheme)

**25EST103 - ENGINEERING GRAPHICS AND
 COMPUTER AIDED DRAWING**

Total Mark: 60**Total Time: 2hrs 30min****General Instructions**

1. Retain Construction lines. Show necessary dimensions. Answer any ONE question from each module.
 Each question carries 15 marks

(Assume any missing data.)

1. A line AB 70 mm long, has its end A 35 mm above HP and 30 mm in front of VP. The top view and front view have a length of 45 mm and 60 mm respectively. Draw its projections. Also locate its traces. CO1 (15)

OR

2. The front view of a line AB 90 mm long is inclined 45° to XY line. The front view measures 65 mm long. Point A is located 15 mm above HP and is in VP. Draw the projections and find its true inclinations. CO1 (15)
3. A cone of base diameter 52 mm and 64 mm height has one of its generator on HP. If the axis of the cone is seen as 30° inclined to XY line in the top view and the base is nearer to VP, draw the projection of the cone. CO2 (15)

OR

4. A hexagonal prism base 30 mm side and axis 75 mm long has an edge of the base parallel to HP and inclined 45° to VP. Its axis makes an angle of 60° with HP. Draw its projection. CO2 (15)
5. Draw the development of a right circular cone of base diameter 60 mm and height 64 mm is resting on HP on its base. An insect moves a point on the base edge to the diametrically opposite point on the same edge through a shortest path along the curved surface on front side. Mark the shortest path in the front and top views of the cone. CO3 (15)

OR

6. A pentagonal pyramid of base 30 mm and altitude 55 mm rests on its base on the HP with one of its base edges perpendicular to VP. It is cut by a plane inclined at 60° to the base. The cutting plane meets the axis at 15 mm above the base. Draw the front view, sectional top view and true shape of the section. What is the true height of the section? CO3 (15)
7. A right circular cone base 5 cm diameter and height 6 cm rests symmetrically over a rectangular block 5 cm x 4 cm base and 3 cm height. Draw the isometric view. CO4 (15)

OR

8. A square pyramid of side 30 mm, axis length 50 mm is centerly placed on top of a cube of side 50 draw the isometric view of the solids. CO4 (15)
