



VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN  
 [AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI]  
 Elayampalayam – 637 205, Tiruchengode, Namakkal Dt., Tamil Nadu.

**Question Paper Code: 10002**

B.E. / B.Tech. DEGREE END-SEMESTER EXAMINATIONS – JAN. / FEB. 2026

First Semester

Computer Science and Engineering

U23GE101 – ENGINEERING GRAPHICS

(Common to EEE, IT, BME and AI&DS)

(Regulation 2023)

Time: Three Hours

Maximum: 100 Marks

Knowledge Levels (KL)	K1 – Remembering	K3 – Applying	K5 - Evaluating
	K2 – Understanding	K4 – Analyzing	K6 - Creating

Answer ALL the questions

(5 x 20 = 100 Marks)

Q.No.	Questions	Marks	KL	CO
1. a)	A line measuring 80 mm long has one of its ends 60 mm above HP and 20 mm in front of VP. The other end is 15 mm above HP and in front of VP. The front view of the line is 60 mm long. Draw the projections of line.	20	K2	CO1
	(OR)			
b)	A hexagonal lamina of 20 mm side rests on one of its corners on the HP. The diagonal passing through this corner is inclined at 45° to HP. The lamina is then rotated through 90° such that the top view of this diagonal is perpendicular to the VP and the surface is still inclined at 45° to the HP. Draw the projections of the lamina.	20	K2	CO1
2. a)	A square pyramid of base side 40 mm and axis 60mm is lying on VP on one of its triangular faces with the plane containing the axis parallel to HP and 30 mm above it. Draw the projections of the pyramid.	20	K3	CO2
	(OR)			
b)	Draw the projections of a cylinder, base 30 mm diameter and axis 40mm long, resting with a point of its base circle on HP such that the axis is making an angle of 30° with HP and parallel to VP.	20	K3	CO2
3. a)	A cone of 45 mm diameter and altitude 60 mm is resting with its base on HP. A section plane parallel to VP cuts the cone at a distance of 15 mm from its center. Draw the top and sectional front views.	20	K3	CO3

(OR)

- b) A pentagonal pyramid, side of base 30 mm and axis 60 mm long, rests with its base on HP and an edge of its base is parallel to VP. A section plane perpendicular to VP and inclined at  $45^\circ$  to HP passes through the axis at a point 35 mm above the base. Draw the sectional top view. 20 K3 CO3
4. a) Draw the development of the lateral surface of the lower portion of a cylinder of diameter 50 mm and axis 70 mm when sectioned by a plane inclined at  $40^\circ$  to HP and perpendicular to VP and bisecting the axis. 20 K2 CO4

(OR)

- b) A regular hexagonal pyramid of side of base 30 mm and height 60 mm is resting vertically on its base on HP such that two of the sides of the base are perpendicular to VP. It is cut by a plane inclined at  $40^\circ$  to HP and perpendicular to VP. The cutting plane bisects the axis of the pyramid. Obtain the development of the lateral surface of the truncated pyramid. 20 K2 CO4
5. a) A pentagonal pyramid, base 30 mm and axis 65 mm long rests with its base on HP. An edge of the base is parallel to VP. Draw the isometric view of the pyramid. 20 K2 CO5

(OR)

- b) Draw front view, top view and side view of the given isometric figure. All dimensions are in mm. 20 K2 CO5

