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

Question Paper Code: 10005

B.E. / B.Tech. DEGREE END-SEMESTER EXAMINATIONS – FEB. 2025

First Semester

Computer Science and Engineering

U23GE101 – ENGINEERING GRAPHICS

(Common to All)

(Regulation 2023)

Time : Three Hours | Maximum : 100 Marks

Answer ALL the questions.

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

Part A

(5 x 20 = 100 Marks)

Q.No.		Questions	Marks	KL	CO
1.	a)	One end P of line PQ 80 mm long is 10 mm above HP and 15 mm infront of VP. The line is inclined at 40° to HP and the top view of the line is making 50° with VP. Draw the projections of the line and find its true inclination with the VP.	20	K2	CO1
		(OR)			
	b)	A regular pentagonal lamina of 30 mm sides has one edge in HP and inclined at an angle of 30^0 to VP. Draw its projections when its surface is inclined at 45^0 to HP.	20	K2	CO1
2.	a)	A cylinder of base diameter 50 mm and height 75 mm is resting on HP in one of its generators with its axis inclined at 50° to VP. Draw the projection.	20	K4	CO2
		(OR)			
	b)	A hexagonal pyramid of base side 30 mm and axis height 50 mm is resting on HP with one of its base edges, such that the axis is inclined at 35^0 to HP and parallel to VP. Draw the projection of the pyramid.	20	K4	CO2
3.	a)	A right circular cone of base diameter 40 mm and axis length 50 mm rests on its base on the HP. It is cut by a plane perpendicular to the HP and inclined at 60° to the VP. The shortest distance between the cutting plane and top view of the axis is 10 mm. Draw the top view and true shape of the section.	20	K3	CO3

(OR)

	b)	A cylinder of diameter 50 mm and height 60 mm rests on its base on HP. It is cut by plane perpendicular to VP and inclined at 45^0 to HP, meets the axis at a distance of 15 mm from the top. Draw the sectional plan and true shape of the section.	20	K3	CO3
4.	a)	A pentagonal pyramid of base edge 25 mm and height 60 mm rests vertically on its base on the HP such that one of its base edge parallel to VP. It is cut by a plane, inclined at 60° to HP and passes through a point 35 mm from the apex. Draw the development of the lateral surface of the pyramid.	20	K2	CO4

(OR)

	b)	A cone of base diameter 40 mm and slant height 60 mm is kept on the ground on its base. An AIP inclined at 45° to the HP cuts the cone through the midpoint of the axis. Draw the development of surface.	20	K2	CO4
5.	a)	Draw the isometric view of a hexagonal pyramid of side of base 30 mm and height 75 mm, when it is resting on HP such that an edge of the base is parallel to VP.	20	K1	CO5

(OR)

	b)	For the object shown in figure1. Draw free hand sketching of i. Front view [7 Marks] ii. Top view and [7 Marks] iii. Left hand side view. [6 Marks]	20	K1	CO5

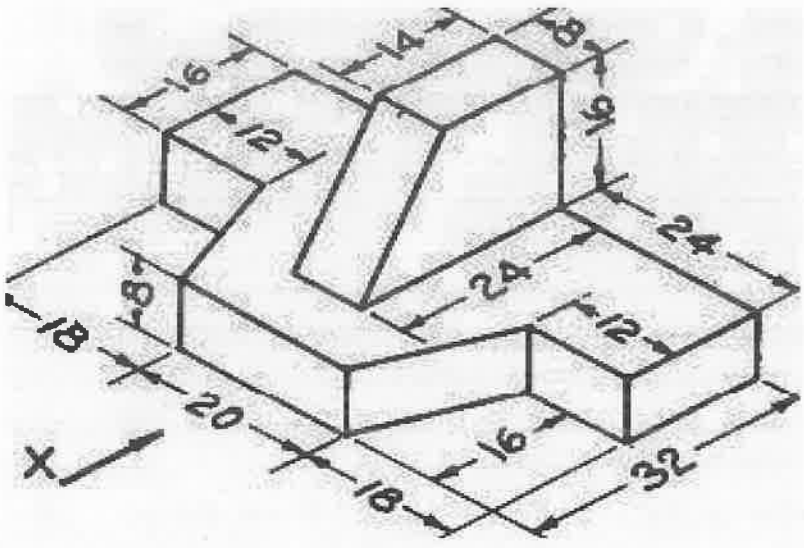

Figure 1.
All Dimensions are in 'mm'.