

**Code No: 9BC01**

**Date: 21-Aug-2023 (FN)**

**B.Tech I-Year II- Semester External Examination, Aug/Sept-2023 (Regular)**

**ENGINEERING GRAPHICS (CSE, IT, CS, AIML, DS and IOT)**

**Time: 3 Hours**

**Max.Marks:60**

**Note:** a) No additional answer sheets will be provided.  
b) All sub-parts of a question must be answered at one place only, otherwise it will not be valued.  
c) Missing data can be assumed suitably.

**Bloom's Cognitive Levels of Learning (BCLL)**

Remember	L1	Apply	L3	Evaluate	L5
Understand	L2	Analyze	L4	Create	L6

**Part - A**

**Max.Marks: 6x2=12**

**ANSWER ALL QUESTIONS, EACH QUESTION CARRIES 2 MARKS.**

	BCLL	CO(s)	Marks
1 What are the applications of Hyperbola?	L2	CO1	[2M]
2 What is the difference between First angle Projection and Third angle Projection?	L2	CO2	[2M]
3 Define a Plane in Projection of Planes.	L1	CO3	[2M]
4 What is the difference between a Prism and a Pyramid?	L2	CO4	[2M]
5 What is isometric scale?	L1	CO5	[2M]
6 What is the difference between isometric view and isometric protection?	L1	CO6	[2M]

**Part – B**

**Max.Marks: 6x8=48**

**ANSWER ALL QUESTIONS. EACH QUESTION CARRIES 8 MARKS.**

	BCLL	CO(s)	Marks
7. a) A fixed point is at distance of 55mm from fixed straight line trace the path of curve if eccentricity is 2/3. Also draw a tangent and normal to it at 45 mm from the directrix.	L1	CO1	[8M]
OR			
b) A circle of 40 mm diameter rolls on a horizontal line for one revolution trace the path of curve. Also draw tangent and normal to it.	L3	CO1	[8M]
8. a) The end A of the line AB is 20 mm above HP and 30 mm in front of VP, while end B is 50 mm above HP and 55 mm in front of VP, the distance between the projectors are 55 mm apart. Draw the projections and find the length and true inclination.	L4	CO2	[8M]
OR			
b) The line AB is 70mm long and is inclined at 30° to HP and 45° VP. It's one end is 10 mm above HP and 15 mm in front of VP. Draw its protections.	L5	CO2	[8M]
9. a) A Pentagonal Plane of side 30mm is inclined to HP at 30° and its surface is inclined to VP at 45°. Draw its Projections when one of the side is perpendicular to HP.	L2	CO3	[8M]
OR			
b) A Hexagonal pyramid of base side 30 mm and axis length 65 mm has its axis is inclined to V.P at 45° draw its projections.	L2	CO3	[8M]

10. a) A square Pyramid, of base side 40mm axis length 65 mm has its base on the HP with two edges of the base perpendicular to VP. It is cut by a section Plane, perpendicular to VP and inclined at  $45^\circ$  to HP and bisecting the axis. Draw its sectional top view, and true shape of the section. L4 CO4 [8M]

OR

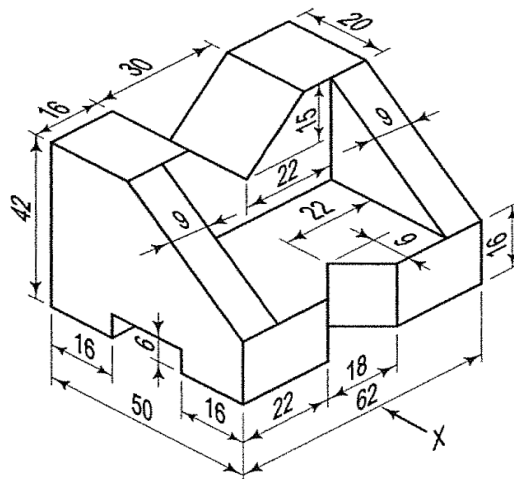
- b) Draw the development of a cone of diameter 40mm axis length 65mm is sectioned by a plane inclined at  $35^\circ$  to HP and passing through midpoint of the axis of the cone. L3 CO4 [8M]

11. a) Draw the isometric view of a cylinder of base diameter 40mm axis length 60 mm when the axis is vertical. L3 CO5 [8M]

OR

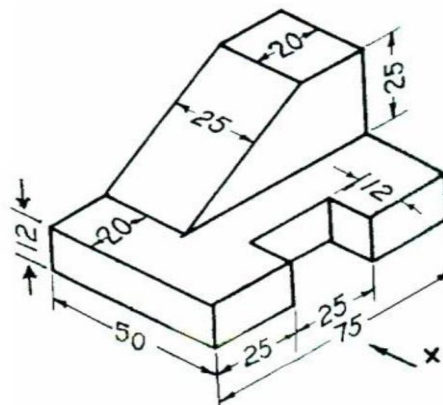
- b) Draw the isometric view of a square pyramid of base side 40mm and axis length 60 mm when the axis is horizontal. L4 CO5 [8M]

12. a) Draw the Front view Top view and side view for the following figure. L4 CO6 [8M]



OR

- b) Draw the Front view Top view and side view for the following figure. L4 CO6 [8M]



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