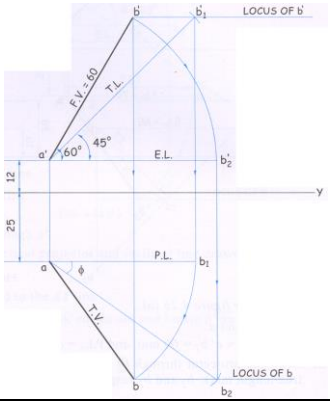
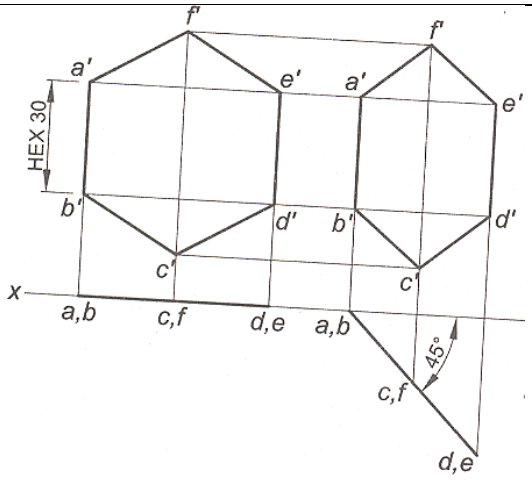
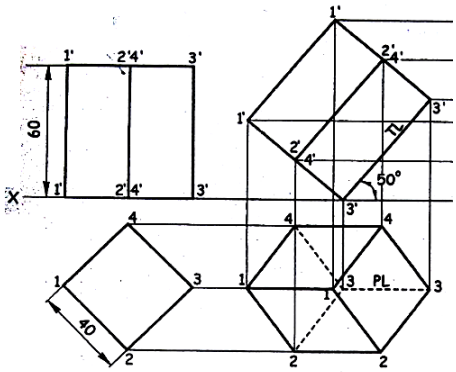
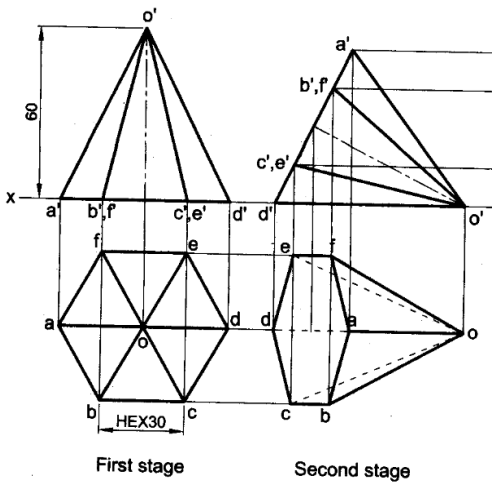
SOMAIYA VIDYAVIHAR UNIVERSITY

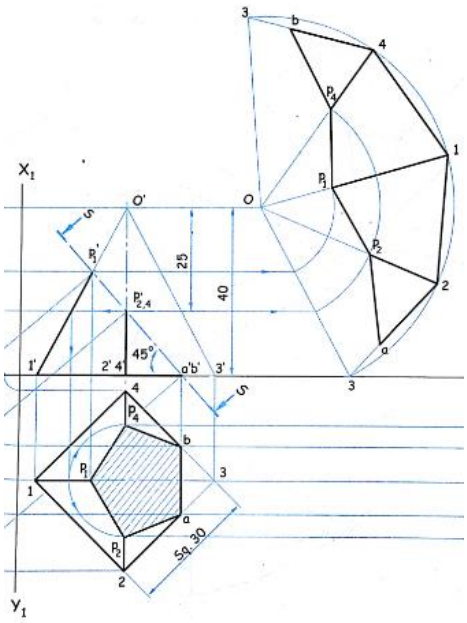
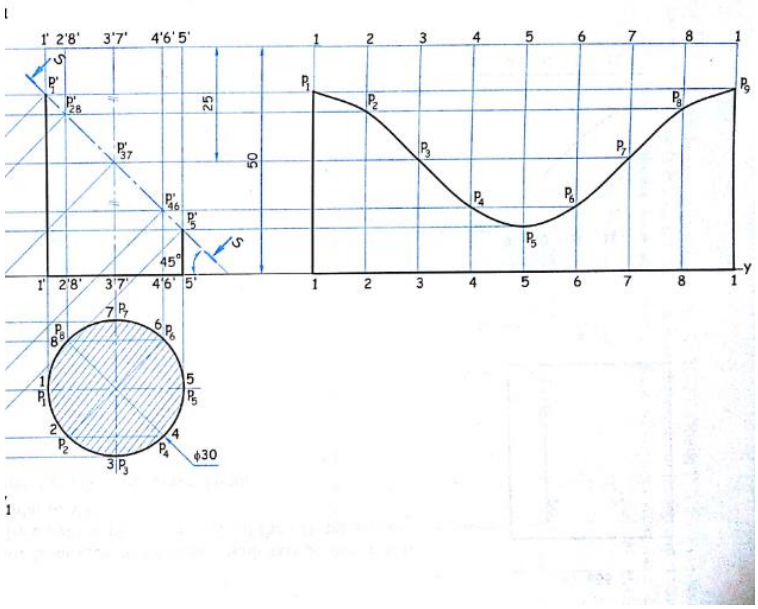
Semester: July 2023 – December 2023 **Maximum Marks: 50** **Examination: End-Semester Examination** **Duration: 2 Hrs.**		
Programme code: 01 **Programme: BTech**	**Class: FY**	**Semester: (SVU 2023)**
Name of the College: **K. J. Somaiya College of Engineering**	**Name of the department: All**	
Course Code: 116U06C105	**Name of the Course: Engineering Drawing**	

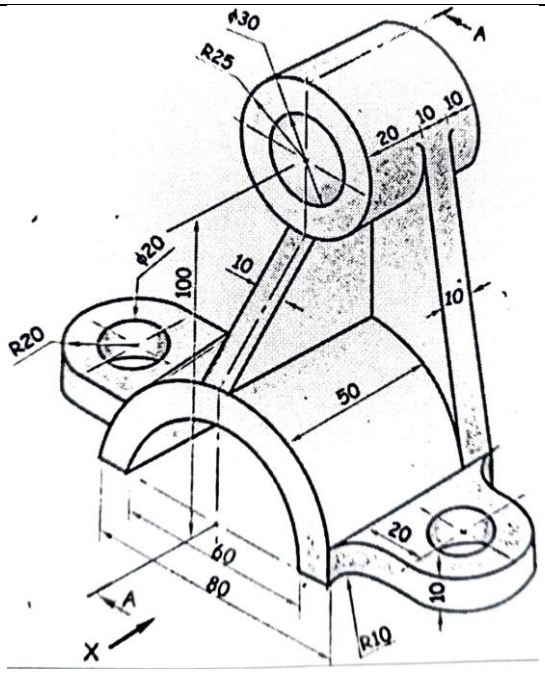
Instructions:

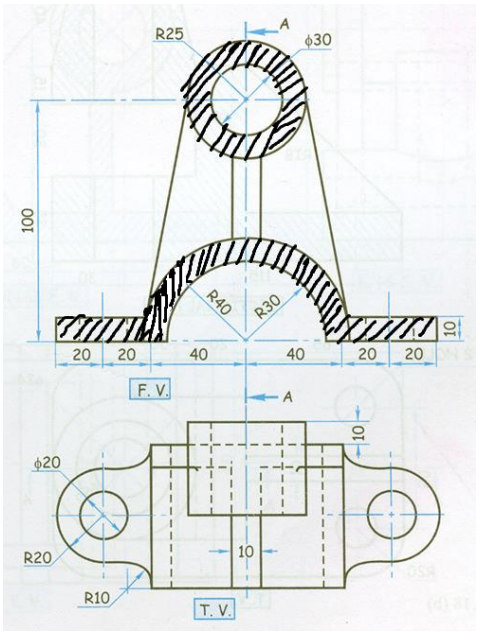
- All Questions are Compulsory.
- Figures to the right indicate full marks.
- Illustrate your answers using figures, sketches, diagrams etc.
- Assume suitable dimensions if necessary and state it clearly.
- **Avoid using colours and layers in your drawings to avoid problems during printing.**
- Line type, line thickness, text size, text font, content of title block, proper dimensions etc. at appropriate place carries weightage during assessment.
- Arrange your drawings properly and on minimum number of pages.
- All the students are requested to save the drawings regularly. In case of any hardware or software problems, extra time will not be allotted to any student for unsaved work.
- Any kind of electronic gadgets capable of memory storage such as pen drive, mobile etc. are not permitted.

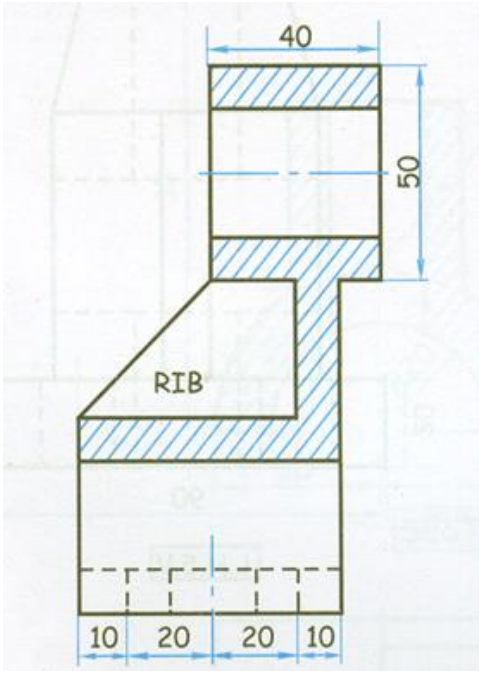
Que. No.	Question Statement	Max. Marks
Q.1	Attempt any **one**	**10**
i)	The FV of a line AB is 60 mm long and is inclined at 60° to the XY line. The end point A is 12 mm above the HP and 25 mm in front of the VP. Draw the projections of line if it is inclined at 45°to the HP and is in the first quadrant. Find the true length and true inclinations of a line with the VP. 	Dim=2 Angle =2 Construction =6
ii)	A Hexagonal plane of 30 mm side has an edge in the VP. The surface of the plane is inclined at 45° to the VP. Draw its projection.	4+6

		
Q.2	Attempt any **one**	**10**
i)	A square prism, side of base 40 mm and height 60 mm is resting on one of the corner of the base on the HP. The longer edge containing the corner is inclined at 50° to the HP. Draw the projections of a prism. 	**4+6**
ii)	A hexagonal pyramid of base side 30 mm and axis 60 mm has one of its slant edges on the HP. Draw its projection. 	**4+6**
Q.3	Attempt any **one**	**10**
i)	A square pyramid, base 30 mm and axis 40 mm long stands vertically on the HP with the edges of a base equally inclined to the VP. It is cut by the section plane perpendicular to the VP, inclined at 45° to the HP and passing through the point on the axis 25 mm from the apex. Draw the FV, sectional TV. Also	**Fv+Tv=3, Sec TV=3, TL=2, Dev=3**

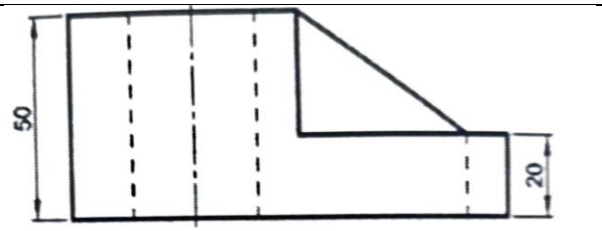
	draw the development of lateral surface assuming apex part to be removed. 	
ii)	A cylinder, 30 mm diameter and 50 mm long stands vertically on its circular base. It is cut by an AIP inclined at 45º to the HP which bisects an axis of a cylinder. Draw the sectional top view and front view. Also draw the development of lateral surface of truncated cylinder. 	**FV+TV=3, Sec TV=3, Deve=4**
Q.4	Attempt the following	**10**
	Draw sectional FV along A-A and TV Insert important dimensions	6+4

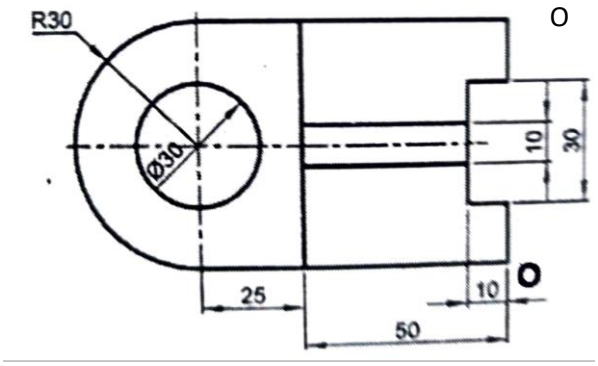






Q.5	Attempt the following	**10**
	Draw an isometric view of given object with respect to origin ‘O’	O-1 Marks+9 Marks





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