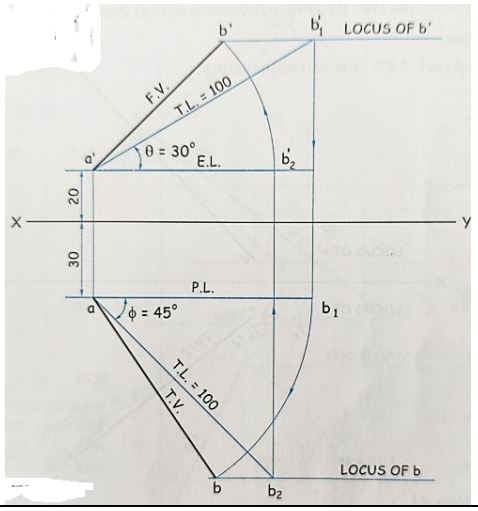
SOMAIYA VIDYAVIHAR UNIVERSITY

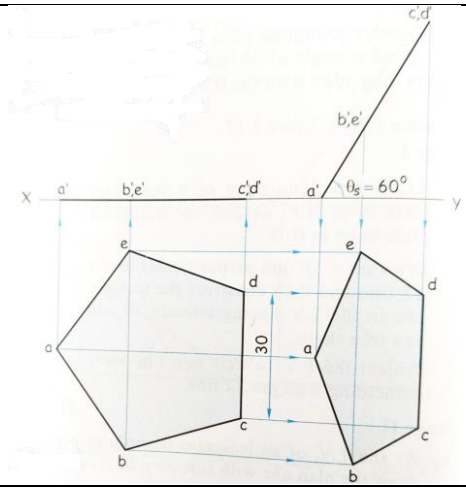
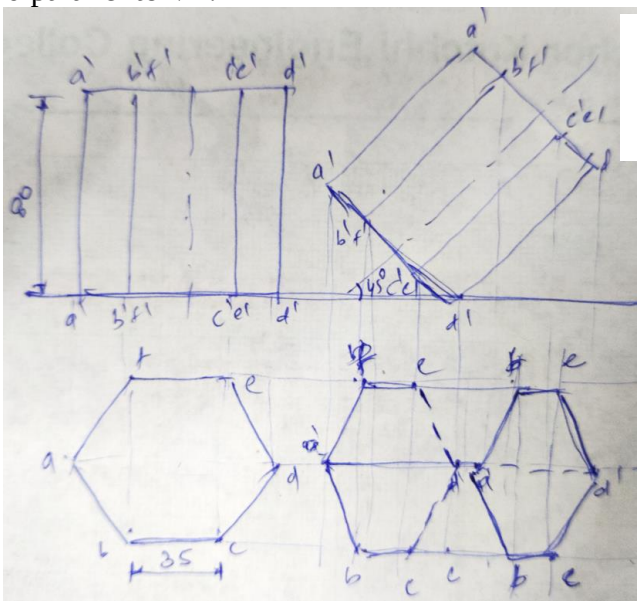
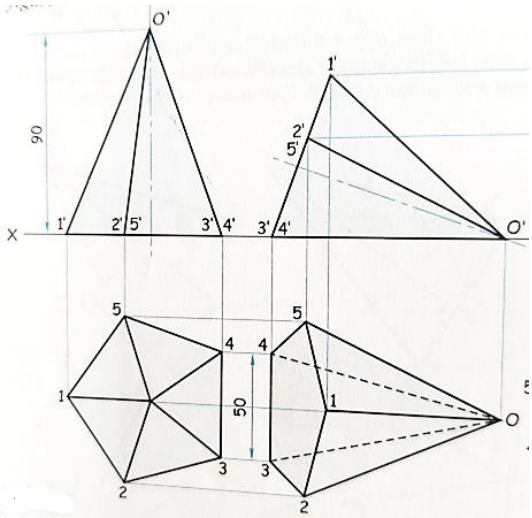
Set C

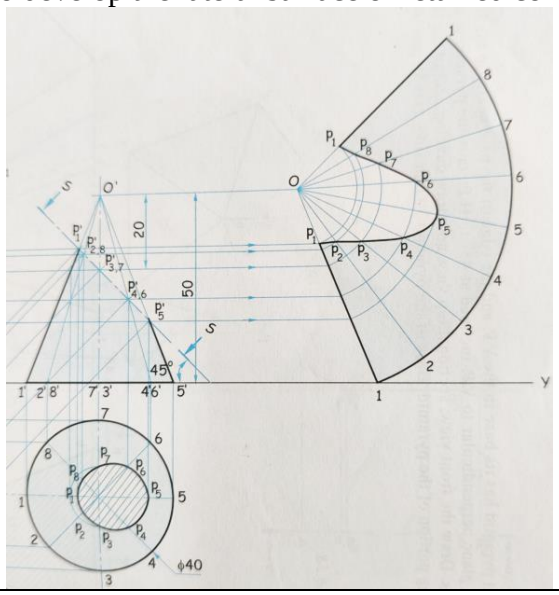
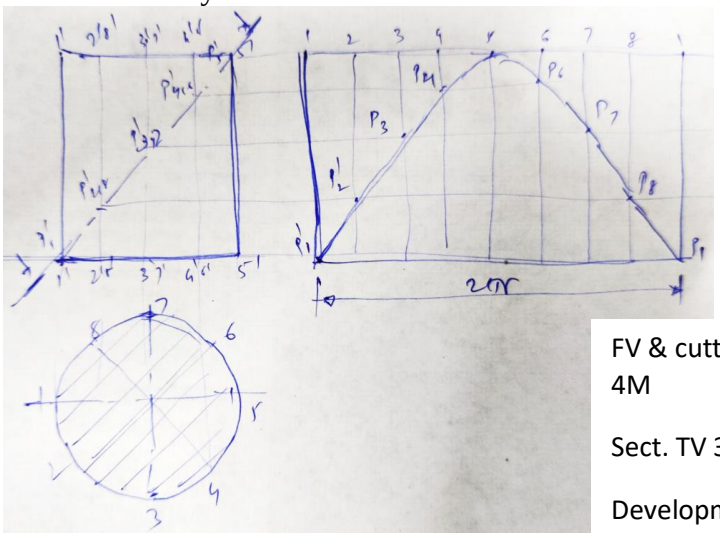
Semester: July 2023 – December 2023 **Maximum Marks: 50** **Examination: End-Semester Examination** **Duration: 2 Hrs.**		
Programme code: 01 **Programme: BTech**	**Class: FY**	**Semester: (SVU 2023)**
Name of the College: **K. J. Somaiya College of Engineering**	**Name of the department: All**	
Course Code: 216U06C105	**Name of the Course: Engineering Drawing (Marking scheme)**	

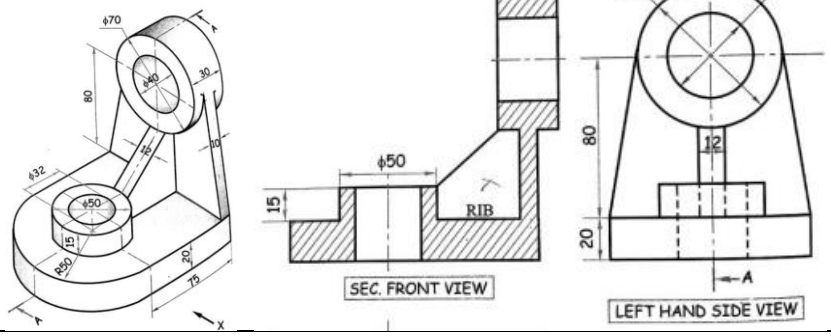
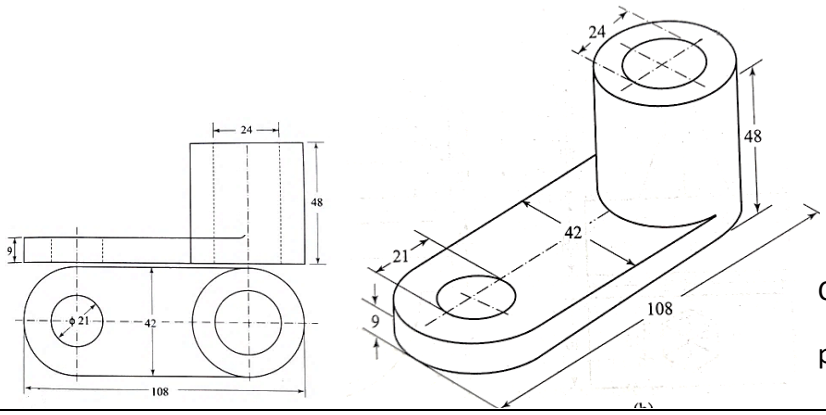
Instructions:

- 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)	A line AB 100 mm long having inclinations of 30º and 45º with HP and VP respectively. It's one end A is 15 mm above HP, 20 mm in front of VP. Draw the projections of line.  Given 3M Solution 5M Dim 2M	
ii)	A regular pentagonal lamina of side 20 mm, is resting on one of corners in the HP and it is inclined at 45º with HP. Draw the projections of lamina.	

	 Stage 1 4M Stage 2 6M	
Q.2	Attempt any **ONE**	**10**
i)	A regular hexagonal prism of base side 35 mm and height 80 mm rests on one of its corner on ground. Draw the projection of the solid if its axis is inclined at 45º to HP and parallel to VP.  Stage 1 4M Stage 2 6M	
ii)	A regular pentagonal pyramid has base side 40 mm and axis height 85 mm. It rests in HP on one of its triangular faces on HP. Draw the projection of the solid.  Stage 1 4M Stage 2 6M	
Q.3	Attempt any **ONE**	**10**

i)	A right circular cone of base diameter 40 mm axis height 50 mm has its base in HP. It is cut by an auxiliary inclined plane which makes an angle 45º with HP and passes through a point on axis 20 mm below the apex. Draw FV and sectional TV. Also develop the lateral surface of retained cone.  FV & cutting plane 4M Sect. TV 3M Development 3M	
ii)	A cylinder of 60 mm diameter of base and 80 mm height is resting on its base on HP. It is cut by a section plane normal to VP and inclined to HP such that it passes through the extreme left bottom corner and extreme right top corner of the elevation. Draw FV and sectional TV. Also draw the development of lateral surface of retained cylinder.  FV & cutting plane 4M Sect. TV 3M Development 3M	
Q.4	Attempt the following	**10**
	Draw sectional FV along A-A and LHSV Insert important dimensions	

	 Sect. FV 6M SV 4M	
Q.5	Attempt the following	**10**
	Draw an isometric view of the given object with respect to origin 'O'  Cylinder 5M plate 5M	