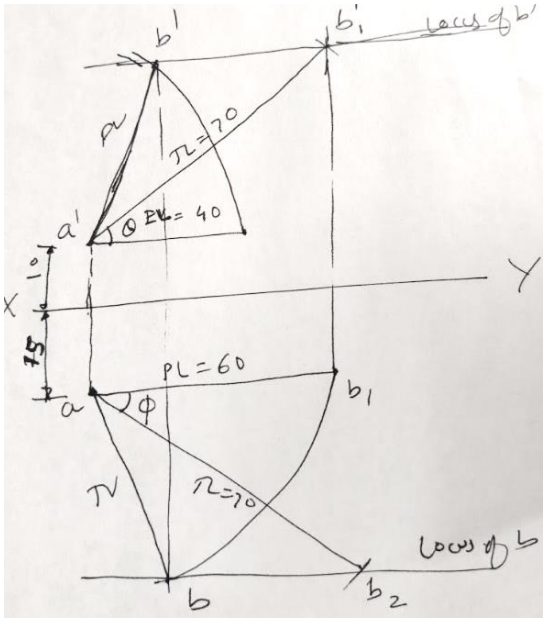
SOMAIYA VIDYAVIHAR UNIVERSITY

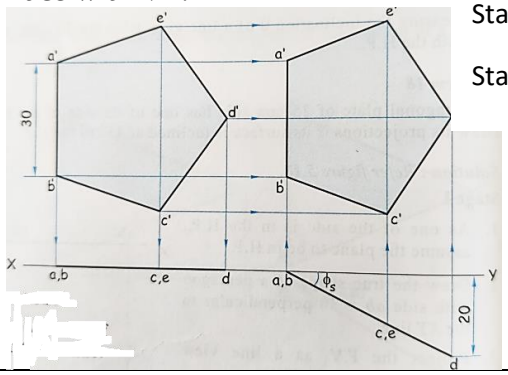
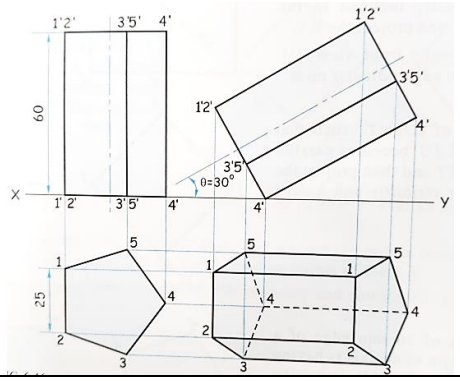
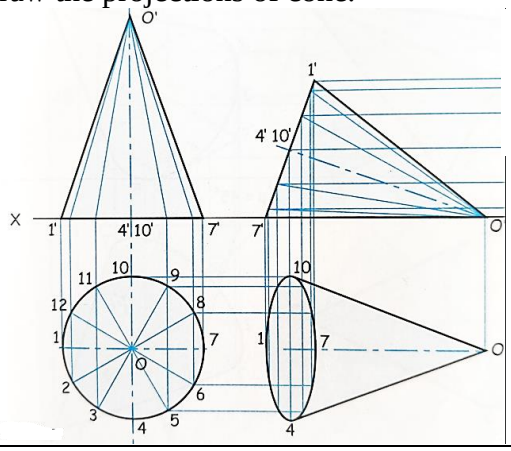
Set A

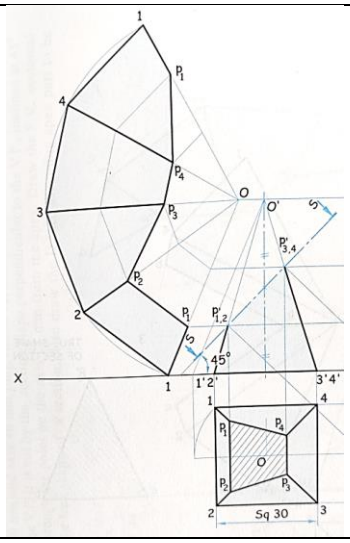
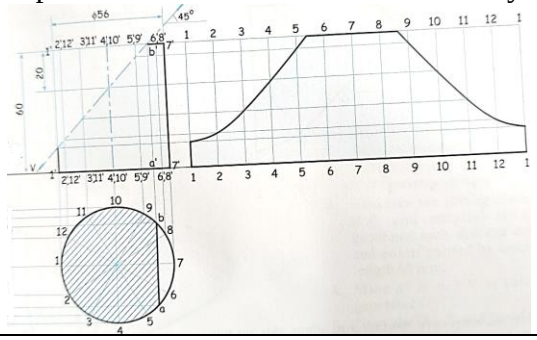
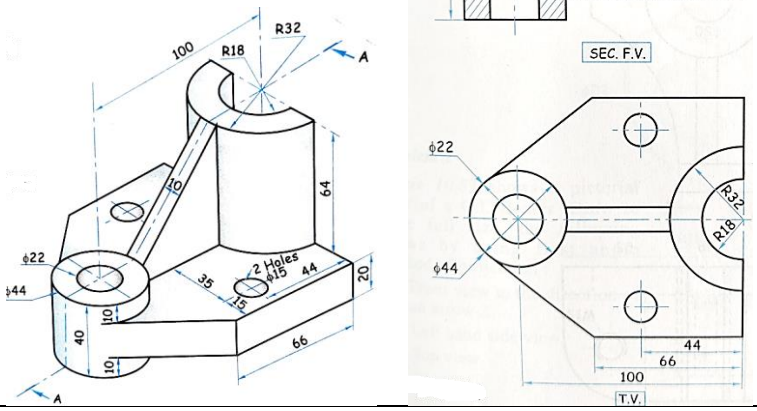
Semester: July 2023 – December 2023 **Maximum Marks: 50** **Examination: End-Semester Examination** **Duration: 2 Hrs.**		
Programme code: 01 **Programme: BTech**	**Class: FY**	**Semester: (SVU 2023)**
Name of the College: **K. J. Somaiya College of Engineering**	**Name of the department: All**	
Course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

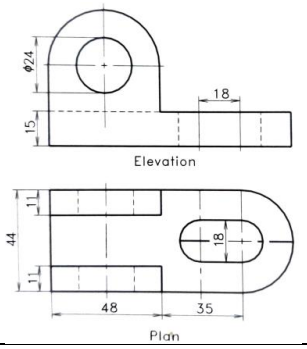
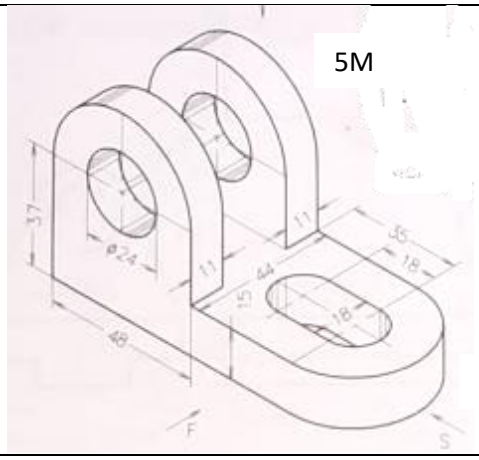
Instructions:

- 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 70 mm long has its end A 10 mm above HP and 15 mm in front of VP. Its top view and front view measures 60 mm and 40 mm respectively. Draw the projections of line and determine its inclinations with HP and VP.  Given 3M Solution 5M Dim 2M	

ii)	A pentagonal plate of 30 mm side has one of its sides in VP. The corner opposite to this side is 20 mm in front of VP. Draw the projections and find the inclination of surface with VP.  Stage 1 4M Stage 2 6M	
Q.2	Attempt any **ONE**	**10**
i)	A pentagonal prism having an edge of base 25 mm axis height 60 mm has one of its corners in HP and the axis is inclined at 30º to HP. Draw the projection of the solid.  Stage 1 4M Stage 2 6M	
ii)	A cone of 50 mm diameter and axis length 70 mm is resting on one of its generators in HP. Draw the projections of cone.  Stage 1 4M Stage 2 6M	
Q.3	Attempt any **ONE**	**10**
i)	A square pyramid of 30 mm edges of base and 50 mm height is resting on its base with one of the edges of base perpendicular to the VP. It is cut by an AIP in such a way that it bisects the axis and is inclined at 45º to the HP. Draw FV and sectional TV. Also develop lateral surface of retained pyramid	

	 FV & cutting plane 4M Sect. TV 3M Development 3M	
ii)	A cylinder of 56 mm diameter and axis 60 mm long stands with its circular base on HP. A section plane perpendicular to VP and inclined at 45º to HP cuts the axis at a point 25 mm from its top end. 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 TV Insert important dimensions  Sect. FV 6M SV 4M	
Q.5	Attempt the following	**10**
	Draw an isometric view of given object with respect to origin 'O'	

	 ϕ24 18 15 Elevation 11 44 18 11 48 35 Plan	 37 ϕ24 11 11 44 15 35 18 18 48 F S 5M 5M	