

**K. J. Somaiya Institute of Technology Sion, Mumbai-22**  
**(Autonomous College Affiliated to University of Mumbai)**

May-June 2025

(B.Tech.) Program: Computer, EXTC, I.T and AI-DS Engineering Scheme III **IV**

Regular Examination: FY Semester: II

Course Code: BSC204 and Course Name: Engineering Graphics

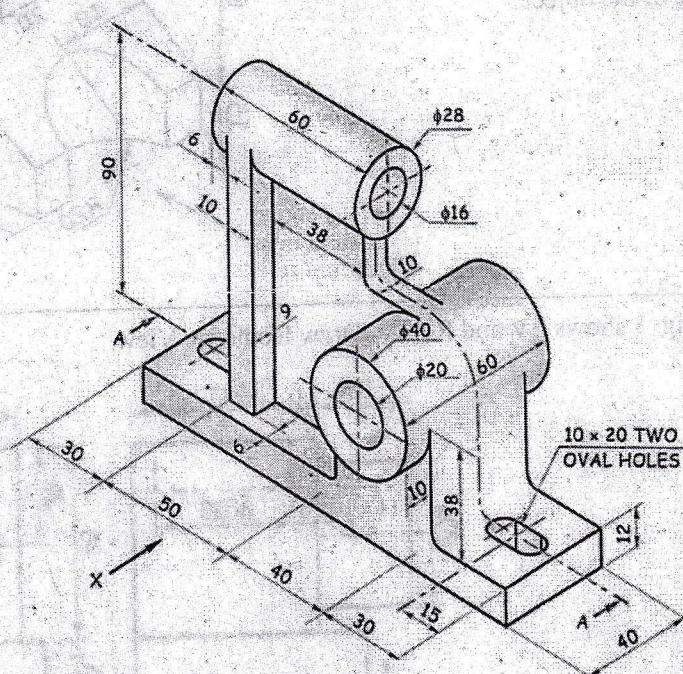
Date of Exam: 14-06-2025

Duration: 03 Hours

Max. Marks: 60

**Instructions:**

- (1) Attempt any four questions out of six.
- (2) Assume suitable dimension, if necessary.
- (4) Retain all construction lines.
- (5) All dimensions are in mm.

Q.NO	QUESTION	Max. Marks	CO	BT level
Q.1	<p>Fig.1 given shows Machine part. Draw:</p> <ol style="list-style-type: none"> <li>Sectional Elevation along X - direction</li> <li>Plan</li> <li>Right hand side view</li> <li>Label the views and give all major dimensions</li> </ol>	15	1	A
	 <p align="center"><b>Fig.1</b></p>			
Q.2	Draw the projections of the Cone, base 50 mm diameter and axis 75 mm long, having one of its generators in the V.P. and inclined at 30° to the H.P. The apex is in the H.P.	15	2	A
Q.3	A Square pyramid with edge of base 40mm and axis 70mm resting on HP such that base edges equally inclined to VP is cut by a section plane which is perpendicular to VP and Inclined 60° to HP bisecting the axis. Draw FV, Sec TV,	15	2	A



**K. J. Somaiya Institute of Technology Sion, Mumbai-22**  
**(Autonomous College Affiliated to University of Mumbai)**

May-June 2025

(B.Tech.) Program: Computer, EXTC, I.T and AI-DS Engineering Scheme III

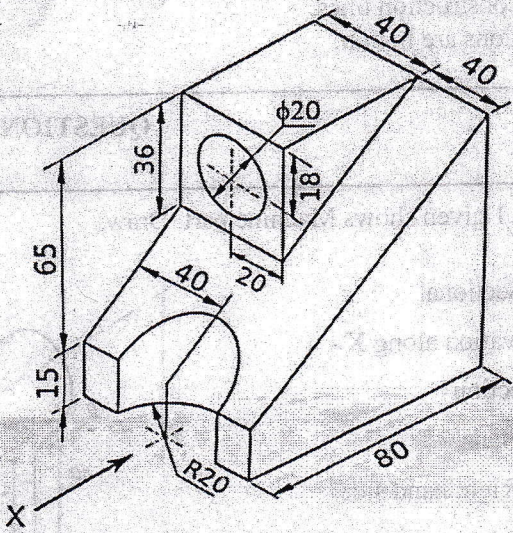
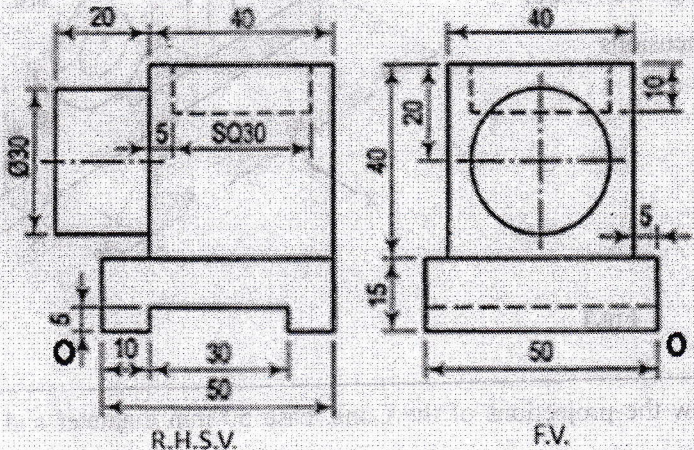
Regular Examination: FY Semester: II

Course Code: BSC204 and Course Name: Engineering Graphics

Date of Exam: 11-06-2025

Duration: 03 Hours

Max. Marks: 60

	True Shape of Section and DLS.				
Q.4	<p>Fig.2 given shows Machine part.</p> <p>Draw</p> <p>a) Elevation along X-direction</p> <p>b) Plan and</p> <p>c) Side View from the Left Hand side of the object</p>	 <p align="center">Fig.2</p>	15	1	A
Q.5	<p>a. Fig. 3 shows FV and RHSV. Draw Isometric View.</p>	 <p align="center">Fig. 3</p>	09	3	A
	<p>b. A pentagonal prism with the side of base 30 mm, axis length 60 mm has one of its corner of the base in the H.P. such that the rectangular face opposite to this corner makes an angle <math>40^\circ</math> with the H.P. and perpendicular to the V.P. Draw the projections.</p>		06	2	A



**K. J. Somaiya Institute of Technology Sion, Mumbai-22**  
**(Autonomous College Affiliated to University of Mumbai)**

May-June 2025

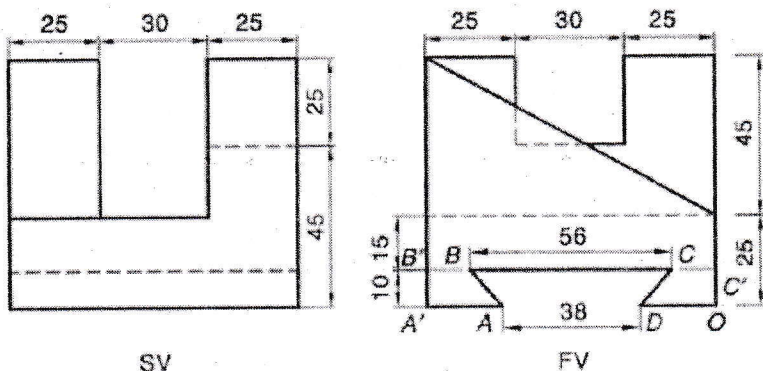
(B.Tech.) Program: Computer, EXTC, I.T and AI-DS Engineering Scheme III /TI  
 Regular Examination: FY Semester: II

Course Code: BSC204 and Course Name: Engineering Graphics

Date of Exam: 11-06-2025

Duration: 03 Hours

Max. Marks: 60

Q.6	a. The F.V. of a line AB is 60 mm long and is inclined at $60^\circ$ to the XY line. The end point A is 12 mm above the H.P. and 25 mm in front of the V.P. Draw the projections of the line if it is inclined at $45^\circ$ to the H.P. and is located in the first dihedral angle. Find the true length and true inclinations of the line with the V.P.	09	2	A
	<p>b. Fig. 4 shows FV and RHSV. Draw Isometric View.</p> <div style="text-align: center;">  <p style="text-align: center;">SV                      FV</p> </div> <p style="text-align: center;"><b>Fig. 4</b></p>	06	3	A

\*\*\*\*\*