

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

April – May 2023

Program: FY B.Tech. All Branches      Scheme: II

Examination: FY      Semester: II

Course Code: BSC204      and      Course Name: Engineering Graphics

Date of Exam: 21/06/2023

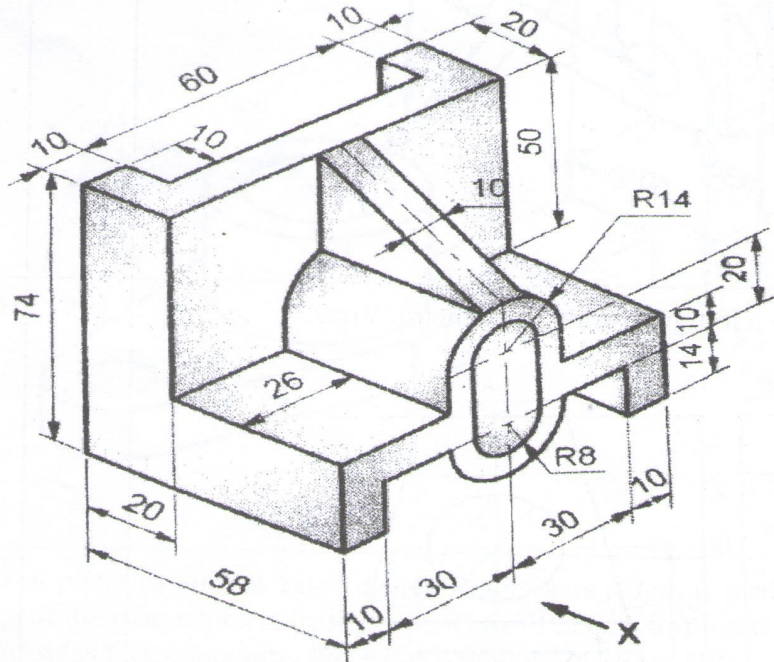
Duration: 03 Hours

Max. Marks: 60

**Instructions:**

- (1) All questions are compulsory.
- (2) Use first angle method of projection.
- (3) Assume suitable dimension, if necessary.
- (4) Retain all construction lines.
- (5) All dimensions are in mm.

		Max. Marks	CO	BT level
Q.1	<b><u>Attempt any one out of two:-</u></b>			
a.	A line AB 70 mm long is inclined at angle $30^\circ$ to HP & $55^\circ$ to VP. Its end A is 15 mm above HP & 25 mm in front of VP. Draw the projections, if the line is in first quadrant. Find the position of points B with respect to HP & VP.	10	CO1	A
b.	<p>The pictorial view of a machine part is shown in following figure. Draw-</p> <ol style="list-style-type: none"> <li>i) Front view along x- direction</li> <li>ii) Top view</li> <li>iii) Insert at least 6 dimensions.</li> </ol>	10	CO4	A



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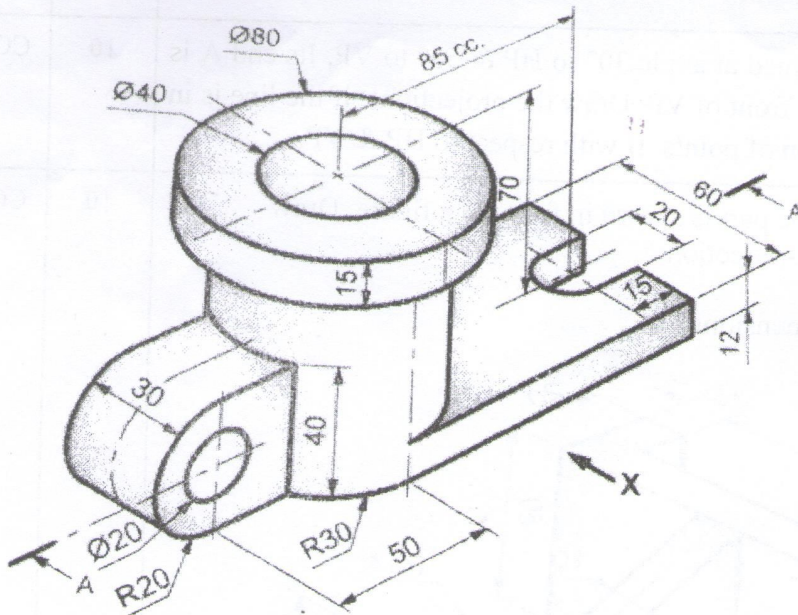
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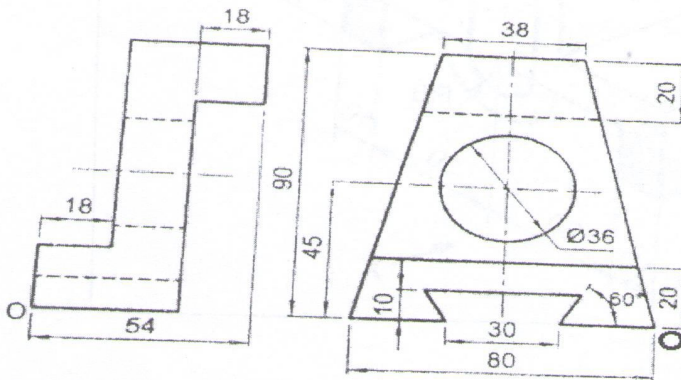
Q.2 **Attempt any two out of three:-**

- a. Following figure shows the pictorial view of an object, draw-
- Sectional front view along section A-A
  - Top view
  - Left hand side view
  - Insert 10 major dimensions



15 CO5 A

- b. From the given 2D views shown in figure, draw an Isometric View.



15 CO6 A

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c.	A cone of base 50 mm diameter & axis 65 mm long is lying on one of its generators on VP with FV of the axis making an angle of 45° with HP. Draw its projections considering the apex nearer to observer.	15	CO2	A
Q.3	<b><u>Attempt any one out of two:-</u></b>			
a.	Following figure shows the pictorial view of an object, draw- i) Sectional front view along section A-A ii) Top view iii) Left hand side view iv) Insert 10 major dimensions.	20	CO5	A
b.	A hexagonal prism of 30 mm base edge & 70 mm axis length is resting on HP on an edge of the base which is inclined at 30° to VP. Draw its projections if the rectangular sides face containing that edge is inclined at 30° to HP.	20	CO2	A

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