

Supplementary Summer Examination – 2026

Course: B. Tech.

Branch: All Branches

Semester: I

Subject Code & Name: BTES103G Engineering Graphics

Max Marks: 60

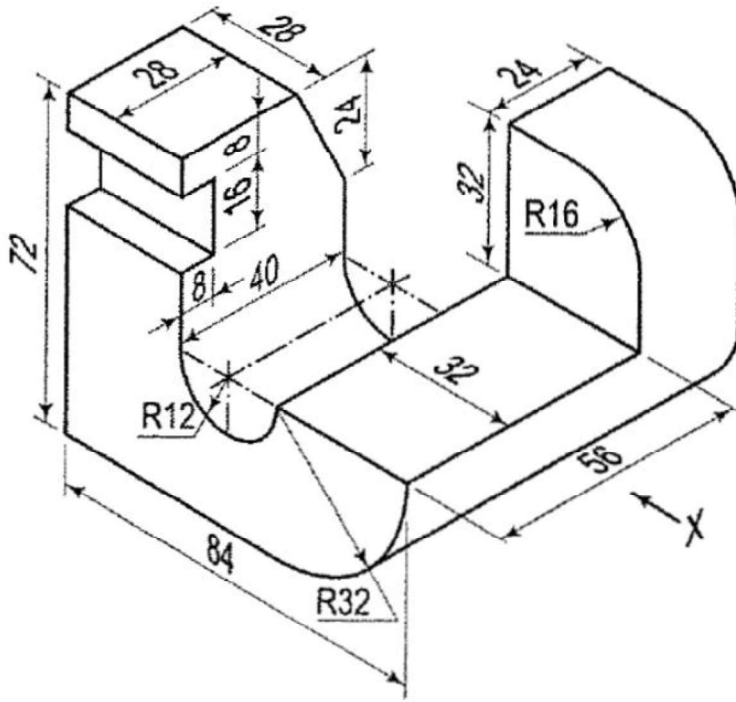
Date: 22/06/2026

Duration: 4 Hr.

Instructions to the Students:

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

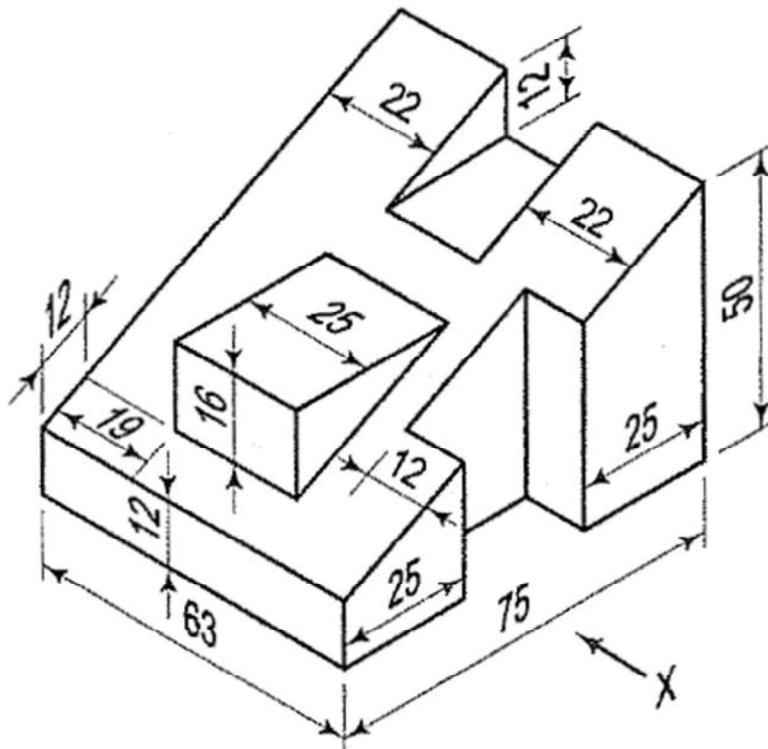
	(Level/CO)	Marks
Q.1 Solve Any Two of the following questions.		(12)
A) Draw a regular hexagon of 25 mm side.	Remember	6
B) Write true or false for the following questions	Remember	6
1. Extension line is a thin type of line.		
2. Centre line is drawn as dash-dot-dash type thick line.		
3. All the dimensions are readable from bottom of the drawing in Unidirectional System of Dimensioning.		
4. Top view is drawn below XY line in first angle projection method.		
5. The front view, top view and side view of a line is always a point.		
6. The top view of a line perpendicular to HP is a point.		
C) Fill in the blanks by selecting the correct alternative.	Understand	6
1. TV stands for _____ (Top View/ Tall View)		
2. Dimension line is drawn as _____ line. (thick/ thin)		
3. Outline of the object is drawn as _____ line. (thick/ thin)		
4. Section lines are drawn at inclination of _____ (45°/30°)		
5. Pyramid has _____ at the top. (apex/ square shape)		
6. Front view of a rectangle is _____, if it is parallel to VP. (square/ rectangle)		
Q.2 Solve Any One of the following.		(12)
A) Following figure, shows the pictorial view of an object, draw its following views by using First angle Projection method.	Apply	12
i) front view looking from direction of X,		
ii) top view		



- B)** Following figure shows the pictorial view of an object; draw its following views by using Third angle Projection method.
- front view looking from direction of X,
 - top view

Apply

12



Q.3 Solve Any One of the following.

(12)

- A)** A straight line AB, 50 mm long, makes an angle of 30° to the HP and 60° to the VP. The end 'A' is in the VP and 15 mm above the HP. Draw the projections of the line AB and also measure the length of FV and TV.

Evaluate

12

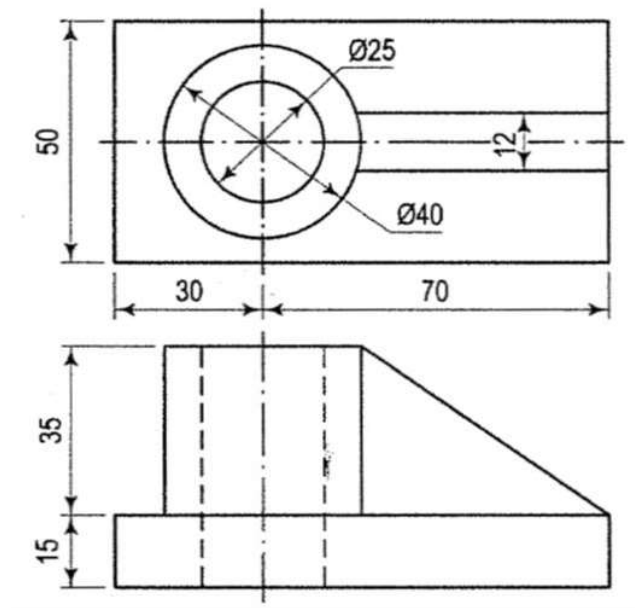
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|----|--|----------|----|
| B) | Draw the projections of a regular pentagon of 30 mm side, having one of its sides in the HP and its surface making an angle of 45^0 with the HP. | Evaluate | 12 |
|----|--|----------|----|

Q.4 Solve Any One of the following. (12)

- | | | | |
|----|--|----------|----|
| A) | A hexagonal pyramid, base 25 mm side and axis 50 mm long, has an edge of its base on the ground (H.P.). Its axis is inclined at 30^0 to the ground and parallel to the V.P., draw its projections. | Evaluate | 12 |
| B) | Draw the projections of a pentagonal prism, base 25 mm side, and axis 50 mm long, resting on one of its rectangular faces on the H.P. with the axis inclined at 45^0 to the V.P. | Evaluate | 12 |

Q.5 Solve Any One of the following. (12)

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|----|--|------------|----|
| A) | A hexagonal prism has a face on the HP and the axis parallel to the VP. It is cut by a vertical section plane, the HT of which makes an angle of 45^0 with XY and which cuts the axis at a point 20 mm from one of its ends. Draw its sectional front view and the true shape of the section. Side of base 25 mm long; height 65 mm. | Evaluate | 12 |
| B) | Draw the isometric view of the following object having FV and TV drawn by third angle projection method. | Synthesize | 12 |



*** End ***