

VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY (Autonomous)
FIRST SEMESTER B.TECH DEGREE EXAMINATION DECEMBER 2025 (2025 SCHEME)

Course Code: 25VJGMEST103

Course Name: ENGINEERING GRAPHICS AND COMPUTER AIDED DRAWING

Max. Marks: 60

Duration: 2 Hours 30 Minutes

Instructions: Retain all Construction lines. Show necessary dimensions.

Q.No.	<i>Answer any ONE question from each module. Each question carries 15 marks.</i>	CO	Marks
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Module 1

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| 1 | A line AB, 80mm long, is inclined at 50^0 to the H.P. and its top view makes an angle of 60^0 with the V.P. The end A is in the H.P. and 20mm in front of V.P. Draw its front view, true inclination with the V.P and traces. | CO1 | (15) |
| 2 | The front view of line MN is 55 mm long. The point M is 15 mm above HP and 20 mm in front of VP. The point N is 35 mm above HP. Draw the projections of the line if its true length is 70 mm. Measure the true inclinations of the line with respect to the reference planes. | CO1 | (15) |

Module 2

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| 3 | A right circular cone, 40 mm base diameter and 60 mm long axis is resting on HP on one point of base circle such that its axis makes 45^0 inclination with HP and 40^0 inclination with VP. Draw its projections. | CO2 | (15) |
| 4 | Draw projections of a cone of base diameter 50 mm and height 50 mm resting on HP on its generator with top view of axis inclined 30 degree to VP. | CO2 | (15) |

Module 3

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| 5 | A pentagonal pyramid of side of base 25mm and altitude 50mm rests on its base on the HP with one of its base sides perpendicular to VP. It is cut by plane bisecting the axis and inclined at 40^0 to the axis. Develop the lateral surface of lower portion of the pyramid. | CO3 | (15) |
| 6 | A square prism of base side 30 mm and height 75 mm rests on the HP on its base with two of its rectangular faces equally inclined to VP. It is cut by a plane perpendicular to VP and inclined at 60^0 to HP meeting the axis at 15 mm from top. Draw its elevation, sectional plan and true shape of section. | CO3 | (15) |

Module 4

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| 7 | A waste paper basket is in the form of a frustum of hexagonal pyramid with base side 80 mm hexagon and top side 120 mm. Draw the isometric projection if its height is 200 mm. | CO4 | (15) |
| 8 | Draw a isometric view of a hemisphere diameter 60 mm kept centrally plane surface upwards on the frustum of a cone of base diameter 90 mm, top face diameter 50 mm and height 40 mm. | CO4 | (15) |
