

Maulana Azad National Institute of Technology, Bhopal

DEPARTMENT OF MECHANICAL ENGINEERING

End Term Examinations, June, 2023

Course: B. Tech I Year II Semester

Subject: ME-105 Engineering Graphics

Time: 3 Hrs.

Max. Marks: 50

Note Attempt all the questions. Each question carries equal marks.

Q. No.	Question	CO	BTL
1	A motorcycle with wheel diameter 50 cm is moving on a plane road. Suddenly it passes over a curved arc of radius 75 cm and the wheel rotates for one complete revolution. Draw the curve traced by a tiny stone on the circumference of the wheel. Also draw a tangent and normal at any point on the curve. (Take scale 1 mm = 1 cm).	1	2
2	A 60 mm long line has its one end in the VP and 20 mm above the HP. The line is inclined at 30° to the HP and 45° to the VP. Draw projections of the line. Also locate HT and VT of the line.	2	3
3	A rectangular plate of 30 mm and 60 mm sides is resting on HP with its shorter edge. The plate is raised such that the top view of the plate appears as square of 30 mm sides. Draw its projections when the resting edge makes an angle of 30° to the VP.	1,2	3
4	A pentagonal pyramid of base side 30 mm and axis length 70 mm is resting on HP on one of its triangular faces. Draw its projections if the base side which is in the HP is inclined at 30° to the VP.	2,3	4
5.	Draw FV, TV and LH SV of the object shown in Fig. below.	1,2	3

