

IMS ENGINEERING COLLEGE	IMSEC/QF/48
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	Issue No. : 2
Tutorials/Assignments/Quizes	Issue Date: 1 May 2010
Prepared BY: MR	Approved By: Director
Subject Name: Computer Graphics	Subject Code: NCS-403

Assignment 5

Q1. Derive a general form of 3D rotation about :

- a. X-axis
- b. Z-axis

Q2. Derive oblique parallel projection and perspective projection matrices.

Q3. Find the coordinates of a pyramid whose coordinates are A(0,0,0), B(1,0,0), C(0,1,0) and D(0,0,1) after mirror reflection with respect to plane passing through

- a. Origin
- b. about point C(0,1,0)

Q4. Using the origin as the centre of projection, derive the perspective transformation onto the plane passing through the point $P_0(x_0, y_0, z_0)$ and having normal vector $N = n_1i + n_2j + n_3k$.

	Q1	Q2	Q3	Q4
CO	2,3	2,3	2,3	2,3
PO	1,2,3,4,12	1,2,3,4,12	1,2,3,4,12	1,2,3,4,12
PSO	1,2,4	1,2,4	1,2,4	1,2,4