CSE 409: Class Test 2

Time: 20 min

Name: **Student ID:**

1. In a perspective projection, the projection plane is x+y=13 and the center of projection is at (1, 2, 3). Find where the point (11, 22, 18) will be projected. [Mark: 7]

2. In a parallel projection, the projection plane is given in point(P)-normal(N) form, where P=(1, 2, 3) and N=2i+3j+6k. Direction of the parallel projection is –i-j-k. Let L be a line segment perpendicular to the projection plane and the length of L is 10. What will be the length of the projection of L? [Mark: 7]

3. A camera is located at (1, 2, 3). Its viewing direction is given by the vector i+j and up direction is –i+j. Derive the view transformation matrix, so that it looks towards the positive Y axis, and its up direction remains along the positive Z axis. [Mark: 6]