Math 201	Quiz 2(a)	Time: 20 minutes		Date: 28- 3- 17		
Name	ID	Sr	Sec. 7	Marks:- / <sub>7</sub>		

Q 1. Find the equation of plane  $P_1$  through A(3, 0, -3) and perpendicular to the vector from the origin to A. Find angle between the planes  $P_1$  and  $P_2$ : x - y = 1.

Q2. Identify and sketch the surface:  $4x^2 + 4y^2 + z^2 - 8y - 4z + 4 = 0$ .

Math 201	Quiz 2(b)	Time: 20 minutes	Date: 28- 3- 17		
Name	ID	Sr	Sec. 7	Marks:-	/7

Q 1. Find the equation of the plane that contains the line x = 4 - t, y = 2t - 1, z = -3t and passes through the point (3, 5, -1).

Q2. Identify and sketch the surface:  $x^2 + 2z^2 - 6x - y + 10 = 0$ .

Math 201	Quiz 2(c)	Time: 20 minutes		Date: 2	Date: 28- 3- 17		
Name	ID	Sr	Sec. 13	Marks:	/7		

Q 1. Find parametric equations and symmetric equations of the line that passes through the points P(2,4,-3) and Q(3,-1,1). At what point this line intersects yz-plane?

Q2. Identify and sketch the surface:  $x^2 - y^2 + z^2 - 24x - 8y + 4z + 55 = 0$ .

Math 201	Quiz 2(d)	Time: 20 minutes		Date: 28- 3- 17		
Name	ID	Sr	Sec. 13	Marks:-	/7	

Q 1. Find parametric equations and symmetric equations of the line that passes through the point P(-6,2,3) and parallel to the line  $\frac{1}{2}x = \frac{1}{3}y = z + 1$ . At what point this line intersects xy-plane?

Q2. Identify and sketch the surface:  $x^2 + y^2 - 2x - 6y - z + 10 = 0$ .