**ASSIGNMENT NO.-10(THE STRAIGHT LINES )**

**(MATHEMATICS)**

1. If and are three points ,find the angle between BA and BC.

2. What is the value of so that the line through and is parallel to the line through

and (0,6)?

3. If points and are collinear,using the concept of slope,prove that

4. Find the equation of the straight line which makes angle of with the positive direction of x-

axis and which cuts an intercept of length 4 on the negative direction of y-axis.

5. Find the equation of the perpendicular bisector of the line segment joining the points and

6. Find the equation of a line which divides the join of and in the ratio 2 : 1 and

perpendicular to it.

7. A line passing through the point makes angle with the positive direction of x-axis.If

this line is rotated through an angle of in clockwise direction ,find its equation in new

position.

8. In what ratio is the line joining the points (2,3) and (4,1) divides the segment joining the points

(1,2) and (4,3)?

9. Find the equation of the line which passes through the point (3,4) and the sum of its intercepts on

the axes is 14.

10. Find the equation of a straight line parallel to and which is such that the sum

of its intercepts on the axes is 15.

11. Find the angle between the pair of lines and .

12. Find the distance between the line and the point (2,1).