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| **CLASS 11** |  **APPLIED MATHEMATICS 241** |  |
| **QUESTION BANK** |  **CHAPTER::COORDINATE GEOMETRY** |  |

1. **Two lines are said to be perpendicular if the product of their slope is equal to:**

1. -1
2. 0
3. 1
4. ½

2. **What is the distance of (5, 12) from the origin?**

1. 5 units
2. 8 units
3. 12 units
4. 13 units

3. **Two lines are said to be parallel if the difference of their slope is**

1. -1
2. 0
3. 1
4. None of these

4. **The slope of a line ax+by+c =0 is**

1. a/b
2. -a/b
3. c/b
4. -c/b

5. **The equation of a line that passes through the points (1, 5) and (2, 3) is:**

1. 2x + y – 7 = 0
2. 2x – y – 7 = 0
3. x + 2y – 7 = 0
4. 2x + y + 7 = 0

6. **If A(6, 4) and B(2, 12) are the two points, then the slope of a line perpendicular to line AB is**

1. -2
2. 2
3. ½
4. -½

7.  Find the equation of circle with center at origin and radius 5 units.

a) x2+y2=25
b) x2+y2=5
c) x2=25
d) y2=25

8. Find the center of the circle with equation x2+y2-4x-10y+4=0.
a) (-2, 5)
b) (-2, -5)
c) (2, -5)
d) (2, 5)

9. **The focus of the parabola y2 = 8x is**

1. (0, 2)
2. (2, 0)
3. (0, -2)
4. (-2, 0)

10. **The focus of the parabola y2 = 8x is**

1. (0, 2)
2. (2, 0)
3. (0, -2)
4. (-2, 0)

 2 MARKS QUESTIONS

11. **Find the slope of the lines passing through the point (3,-2) and (-1,4)**

**12. Write the equation of the line through the points (1,-1)and (3, 5)**

**13. Find the equation of the line, which makes intercepts -3 and 2 on the and -axis**

 **respectively.**

**14.  Equation of a line is**$3X-4Y+10=0 $**find its slope.**

**15. Find the equation of the parabola with focus at** F(5,0) **& directrix is** x=−5.

 3 MARKS QUESTIONS

16. Determine the equation of the circle with radius 4 and Centre (-2, 3)

17. Determine the focus coordinates, the axis of the parabola, the equation of the directrix and the

 latus rectum length for y2 = -8x

18. **Find the equation of the circle which touches x-axis and whose centre is (1,2).**

 **4 MARKS QUESTIONS**

**19. Find the equation of the circle which passes through the points (2, 3) and**

 **(4, 5) and the centre lies on the straight line y – 4x + 3 = 0.**

**20. Find the equation of each of the following parabolas.**
 **(i) Directrix, x = 0, focus at (6, 0)**
 **(ii) Vertex at (0,4), focus at (0, 2)**
 **(iii) Focus at (-1, -2), directrix x – 2y + 3 = 0**

**21.** Calculate the slope of a line, that passes through the origin, and the mid-point of the segment

 joining the points P (0, -4) and B (8, 0).