

## FA Part 2 Mathematics Full Book Test Online

| Sr | Questions   | Answers Choice  |
|----|---|---|
| 1  | Zero vector is perpendicular to:  | <p>A. Every vector</p> <p>B. Unit vector only</p> <p>C. Position vector only</p> <p>D. Not any vector</p>   |
| 2  | The feasible region is _____ if it can easily be enclosed within a circle.                                  | <p>A. Bounded</p> <p>B. Exist</p> <p>C. Unbounded</p> <p>D. None of these</p>   |
| 3  | The two parts of a right circular cones are called:   | <p>A. Nappes</p> <p>B. Apex of the cone</p> <p>C. Generator</p> <p>D. Vertex</p>  |
| 4  | For different values of k, the equation $4x + 5y = k$ represents lines _____ to the line $4x + 5y = 0$ .    | <p>A. Perpendicular</p> <p>B. Parallel</p> <p>C. Equal</p> <p>D. None of these</p>  |
| 5  | The curves obtained by cutting a _____ double right circular cone by a _____ are called conics:             | <p>A. Straight line</p> <p>B. Plane</p> <p>C. Curve</p> <p>D. None of these</p>   |
| 6  | If $a = 0$ , then the line $ax + by + c = 0$ is parallel to:  | <p>A. y - axis</p> <p>B. x - axis</p> <p>C. along y - axis</p> <p>D. None of these</p>  |
| 7  | A line segment joining two distinct points on a parabola is called a _____ of the parabola:                 | <p>A. Chord</p> <p>B. Vertex</p> <p>C. Focus</p> <p>D. Directrix</p>  |
| 8  | If r is the radius of any circle and C its center, then any point $P(x_1, y_1)$ lies on the circle only if: | <p>A. <math> CP  &lt; r</math></p> <p>B. <math> CP  &gt; r</math></p> <p>C. <math> CP  = r</math></p> <p>D. None of these</p>                     |
| 9  | Let $f(x) = x^3 + \sin x$ , then f(x) is:   | <p>A. Even function</p> <p>B. Odd function</p> <p>C. Power function</p> <p>D. None of these</p>   |
| 10 | The condition for the line $y = mx + c$ to be a tangent to the circle $x^2 + y^2 = a^2$ is $c =$ _____:     |   |
| 11 |                         |   |
| 12 | The horizontal line $x' ox$ is called:  | <p>A. x-axis</p> <p>B. y-axis</p> <p>C. abscissa</p> <p>D. ordinate</p>   |
| 13 |                         | <p>A. <math>\ln  \sin x </math></p> <p>B. <math>-\ln  \sin x </math></p> <p>C. <math>\ln  \cos x </math></p> <p>D. <math>-\ln  \cos x </math></p> |
| 14 | If a straight line is perpendicular to x-axis, then its slope is:   | <p>A. 0</p> <p>B. 1</p> <p>C. 2</p> <p>D. Undefined</p>   |
| 15 |                         | <p>A. x - axis</p> <p>B. z - axis</p> <p>C. y - axis</p> <p>D. None of these</p>  |
| 16 | $y - y_1 = m(x - x_1)$ is the equation of straight line in:   | <p>A. Slope-intercept form</p> <p>B. Point-slope form</p> <p>C. Normal form</p> <p>D. Intercepts form</p>   |

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| 17 | The number e denotes the _____ of the conic:  | A. Directrix<br>B. Vertex<br>C. Focus<br>D. Eccentricity                                     |
| 18 | The equation of a straight line which parallel to the line $3x - 2y + 5 = 0$ and passes through $(2, -1)$ is: | A. $3x + 2y - 8 = 0$<br>B. $3x - 2y + 8 = 0$<br>C. $3x - 2y - 8 = 0$<br>D. $3x + 2y + 8 = 0$ |
| 19 | Question Image <input type="text"/>   | A. $\tan x$<br>B. $\cot x$<br>C. $-\tan x$<br>D. $-\cot x$                                   |
| 20 | Question Image <input type="text"/>   | A. Constant<br>B. Implicit<br>C. Explicit<br>D. Inverse                                      |