


ICS Part 2 Mathematics Full Book Test Online

| Sr | Questions | Answers Choice |
|----|---|---|
| 1 | Question Image | <p>A. $\ln \sec x + \tan x + c$ B. $\ln \operatorname{cosec} x - \cot x + c$ C. $\ln \sec x - \tan x + c$ D. $\ln \operatorname{cosec} x + \cot x + c$</p> |
| 2 | Zero vector is perpendicular to: | <p>A. Every vector B. Unit vector only C. Position vector only D. Not any vector</p> |
| 3 | Question Image | <p>A. x - axis B. z - axis C. y - axis D. None of these</p> |
| 4 | If the focus lies on the x-axis with coordinates $F(a, 0)$ and directrix of the parabola is $x = -a$ then the equation of parabola is: | <p>A. $x^2 = 4ay$ B. $y^2 = 4ax$ C. $x^2 = -4ay$ D. $y^2 = -4ax$</p> |
| 5 | The general solution of differential equation of order n contains n arbitrary constants, which can be determined by ----- initial value conditions. | <p>A. 1 B. 0 C. 2 D. n</p> |
| 6 | The length of the latus rectum of the parabola $y^2 = 4ax$ is: | <p>A. a B. $4a$ C. $2a$ D. None of these</p> |
| 7 | In the translation of axes which formula is true: | <p>A. $x = X + h$ B. $X = x + h$ C. $x + X = h$ D. None</p> |
| 8 | Question Image | |
| 9 | In the case of rotation of axes which formula is true: | |
| 10 | The graph of the parabola $y^2 = -4ax$ is symmetric about: | <p>A. x-axis B. major axis C. y-axis D. minor axis</p> |
| 11 | Question Image | <p>A. $4a$ B. $2a$ C. $4b$ D. $2b$</p> |
| 12 | If the degree of a polynomial function is -----, then it is called a linear function: | <p>A. 0 B. 1 C. 2 D. 3</p> |
| 13 | A function $P(x) = 6x^4 + 7x^3 + 5x + 1$ is called a polynomial function of degree ----- with leading coefficient -----. | <p>A. 4, 6 B. 2, 7 C. 2, 3 D. 2, 5</p> |
| 14 | The small change in the value of $f(x)$, positive or negative is called the ----- of x . | <p>A. Increment B. Differential C. Derivative D. none of these</p> |
| 15 | Question Image | |
| 16 | Which one is an identity function ? | <p>B. $f(x) = g(x)$ C. $f(x) = x$ D. $f(x) = 1$</p> |
| 17 | If the graph of f is entirely below the x-axis, then the definite integral is: | <p>A. Positive B. Positive or negative C. Negative D. Positive and negative</p> |

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| 18 | The directrix of the parabola $x^2 = -4ay$ is: | A. $x = a$ B. $x = -a$ C. $y = a$ D. $y = -a$ |
| 19 | Question Image  | A. 36 B. 42 C. 48 D. 12 |
| 20 | A region, which is restricted to the _____ quadrant, is referred to as a feasible region for the set of given constraints. | A. First B. Third C. Second D. Fourth |