FA Part 2 Mathematics Full Book Test Online

Sr	Questions	Answers Choice
1	The linear function f(x) = ax + b is an identity function if:	A. a = 0, b = 1 B. a = 1, b = 0 C. a = 1, b = 1 D. a = 0, b = 1
2	Question Image	A. - cosec² x B. cosec²x C. - cosec x cot x D. cosec x cot x
3	x = c is a line:	A. Perpendicular to x-axis B. Parallel to x-axis C. Perpendicular to y-axis D. None of these
4	The conic is an ellipse, if:	A. e = 1 B. e > 1 C. 0 < e < 1 D. e = 0
5	Question Image	A. sin x B. -cos x C. -sin x D. cos x
6	x = 4 is the solution of inequality:	A. x + 3 > 0 B. x - 3 < 0 C. -2x + 3 > 0 D. x + 3 < 0
7	A chord containing the center of the circle is called _____ of the circle:	A. Diameter B. Chord C. Radius D. None of these
8	The point of intersection of the perpendicular bisectors of a triangle is called:	A. Centroid B. Ortho-center C. Circums-center D. In-center
9	x = c is a vertical line parallel to _____.	A. x-axis B. y-axis may be C. y-axis D. None of these
10	Question Image	A. 5 sin x B. cosh (5x) C. 5 cosh (5x) D. -5 cosh (5x)
11	A function, which is to be maximized or minimized is called an _____:	A. Maximum function B. Objective funciton C. Minimum function D. None of these
12	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 B. 3x - 2y + 8 = 0 C. 3x - 2y - 8 = 0 D. 3x + 2y + 8 = 0
13	The Maclaurin series expansion is valid only if it is:	A. Convergent B. Divergent C. Increasing D. Decreasing
14	For different values of k, the equation 4x + 5y = k represents lines _____ to the line 4x + 5y = 0.	A. Perpendicular B. Parallel C. Equal D. None of these
15	The term dy (or df) = f '(x) dx is called the _____ of the dependent variable y.	A. Differentiation B. Integration C. Differential D. None of these

16	Inclination of X-axis or of any line parallel to X-axis is:	A. Zero D. Undefined
17	If the directed distances AP and PB have same signs, then their ratio is positive and P is said to divide AB:	A. Internally B. May be divide C. Externally D. None of these
18	The equation to the straight line which passes through the point (2, 9) and makes an angle of 45° with x-axis is:	A. x + y + 7 = 0 B. x - y + 7 = 0 C. y - x + 7 = 0 D. None of these
19	There are _____ ordered pairs that satisfy the inequality ax + by > c.	A. Finitely many B. Two C. Infinitely many D. Four
20	Point (5, 6) lies ..... the circle $x^2 + y^2 = 81$:	A. Outside B. Inside C. On D. None of these