

## FA Part 2 Mathematics Full Book Test Online

Sr	Questions	Answers Choice
1	Gottfried Wilhelm Leibniz was a (an) ----- mathematician:	A. German B. English C. Swiss D. French
2	Which are the following triples can be direction angles of a single vector:	A. $45^\circ, 45^\circ, 60^\circ$ B. $30^\circ, 45^\circ, 60^\circ$ C. $45^\circ, 60^\circ, 60^\circ$ D. $30^\circ, 30^\circ, 30^\circ$
3	A function, which is to be maximized or minimized is called an _____:	A. Maximum function B. Objective function C. Minimum function D. None of these
4	If the cutting plane is parallel to the axis of the cone and intersects both of its nappes, then the section a / an:	A. Parabola B. Hyperbola C. Ellipse D. None of these
5	Question Image	A. Circle B. Parabola C. Hyperbola D. Ellipse
6	In the case of rotation of axes which formula is true:	A. equal to each other B. not equal to each other C. nearly equal to each other D. None of these
7	Question Image	A. $x = 0$ B. $x = -a$ C. $y = 0$ D. $y = -a$
8	The graph of the parabola $y^2 = -4ax$ is symmetric about:	A. $x$ -axis B. major axis C. $y$ -axis D. minor axis
9	$\text{Cosh}^2 x + \text{Sinh}^2 x =$	A. $\text{Cosh } x^2$ B. $\text{Cosh } 2x$ C. $\text{Sinh } 2x$ D. $\text{Tanh } 2x$
10	The axis of the parabola $x^2 = 4ay$ is:	A. $x = a$ B. $x = -a$ C. $y = a$ D. $y = -a$
11	The directrix of the parabola $x^2 = 4ay$ is:	A. $x = a$ B. $x = -a$ C. $y = a$ D. $y = -a$
12	Question Image	A. $\sin x$ B. $\cos x$ C. $-\sin x$ D. $-\cos x$
13	If the directed distances AP and PB have the opposite signs, i.e; p is beyond AB, then their ratio is negative and P is said to divide AB:	A. Internally B. May divide C. Externally D. None of these
14	A line that touches the curve without cutting through it is called:	A. Straight line B. Tangent line C. Normal line D. Vertical line
15	The point of intersection of the perpendicular bisectors of a triangle is called:	A. Centroid B. Ortho-center C. Circums-center D. In-center
16	Question Image	A. Derivative B. Differential C. Integral

D. None of these

17 Question Image

- A.  $\ln |\sec x + \tan x| + c$
- B.  $\ln |\cosec x - \cot x| + c$
- C.  $\ln |\sec x - \tan x| + c$
- D.  $\ln |\cosec x + \cot x| + c$

18 Question Image

- A. Unit vector
- B. Null vector
- C. Free vector
- D. None of these

19 If a circle and a line intersect in two points, then the line is called:

- A. A chord
- B. A secant
- C. A diameter
- D. None of these

20 Question Image

- A. Left or right
- B. Upper or lower
- C. Open
- D. None of these