

## Mathematics FA Part 1 Online Test

Sr	Questions	Answers Choice
1	Question Image	A. scalar matrix B. diagonalmatrix C. triangularmatrix D. none of these
2	Multiplicative inverse of -i is:	A. i Bi C. 1 D1
3	Question Image	
4	The number of ways in which fiver persons can sit at a round table is:	A. 4! B. 5! D. none of these
5	If W = {0, 1, 2, 3, 4,}, N = {1, 2, 3, 4} then N - W = ?	A. W B. {0} D. none of these
6	Question Image	
7	$tan^{-1}(-\sqrt{3})$ is:	
8	-2 sin α sin ß =	A. $\sin (\alpha + \beta) + \sin (\alpha - \beta)$ B. $\cos (\alpha + \beta) + \cos (\alpha - \beta)$ C. $\cos (\alpha + \beta) - \cos (\alpha - \beta)$ D. $\cos (\alpha - \beta) + \cos (\alpha - \beta)$
9	If $(x-2, 2) = (3, 2)$ , then:	A. x = 5 B. x = 2 C. x = -5 D. x = 3
10	The ration of the sum and product of roots of $7x^2$ - $12x + 18 = 0$ is:	A. 7:12 B. 2:3 C. 3:2 D. 7:18
11	If A is a square matrix, then A - A <sup>t</sup> is:	
12	Distinct objects means:	A. identical objects B. not identical C. similar D. none of these
13	A groupoid (S) is called if it is associative in S:	A. group B. abelian-group C. semi-group D. associative-group
14	Domain of finite sequence is:	A. set of natural numbers B. subset of N C. R D. none
15	The objects in a set are called:	A. elements B. sub-sets C. whole numbers D. overlapping sets
16	In a circle of radius r, an arc of length kr will subtend in angle of radians at the center:	A. s B. k C. r D. Θ
17	Question Image	A. 1 B5 C1 D. none
18	The identity element in a group is:	A. unique B. inifinite C. both a and b

		D. not possible
19	If 2s = a + b + c, where a, b, c are the sides of a triangle ABC, then area of tri given by:	iangle ABC is
20	If $\sin \alpha = \cos \beta$ in any triangle ABC then:	A. $\alpha + \beta = 90^{\circ}$ B. $\alpha + \beta = 180^{\circ}$ C. $\alpha + \beta = 360^{\circ}$ D. $\alpha + \beta$