

Mathematics FA Part 1 Online Test

Sr	Questions	Answers Choice
1	Question Image	A. A is superset of B B. B is superset of A C. A is subset of B D. A is equivalent to B
2	Question Image	
3	Question Image	A. 0 B. i C. -i D. 1
4	If $z = x + iy = r(\cos \Theta + i \sin \Theta)$, then $\arg z$ is:	A. $\tan \Theta$ B. $\cos^2 \Theta + \sin^2 \Theta$ C. r D. Θ
5	Factors of $x^2 + y^2$ are:	A. $(x + iy)(x - iy)$ B. $(x + y)(x - y)$ C. $(x + y)(x + y)$ D. none
6	Which of the following is correct:	A. $2 + 7i \geq 10 + i$ B. $1 + i \geq 1 - i$ C. $4 + 3i \geq 1 + 3i$ D. none of these
7	Question Image	A. i B. 0
8	Question Image	B. $x = 0, y = 0$
9	Question Image	A. z is purely real B. z is any complex number C. z is purely imaginary D. real part of z = imaginary part of z
10	$\tan^{-1}(-\sqrt{3})$ is:	
11	Question Image	
12	$\cos(\tan^{-1} \infty) =$	A. 0 B. ∞ C. 1
13	$\tan(\pi + \cot^{-1} x) =$	
14	$\tan(\pi + \tan^{-1} x) =$	A. x B. $\pi + x$ C. $\pi - x$ D. none of these
15	$\cos(2\sin^{-1} x) =$	A. $1 - 2x^2$ B. $1 + 2x^2$ C. $2x^2 - 1$ D. $x^2 - 1$
16	Question Image	A. 0
17	Question Image	
18	Question Image	
19	Question Image	
20	Question Image	