Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. 1 B. 3 C. 2-i D. -1
2	The sides of a right angled triangle are in A.P The ratio of sides is	A. 1:2:3 B. 3:4:5 C. 2:3:4 D. 5:8:3
3	Parametric equation of circle : $x^2+y^2+r^2$, are	A. r1 = x cos□ r² = y sin□ B. x = r cos□ y = r sin□ C. x = r sin□1 y = r sin□2 D. x = r₁ cos□ y = r_{2 sin□}
4	Union of the sets of rational and irrational numbers is called 6th set of	A. Natural numbers B. Real numbers C. Whole numbers D. Prime numbers
5	If e,e′ be the eccentricities of two conics S=0 and S′ =0 and if e2 +e′2 =3 then both S and S′ can be	A. Hyperbola B. Parabolas C. Ellipses D. None of these
6	1,1/3,1/5,1/7,1/9..... is a	A. geometric sequence B. finite sequence C. infinite sequence D. arithmetic series
7	Question Image	
8	The number of subset of {0} is	A. 1 B. 2 C. 3 D. None
9	If z=(x,y) then z has no multiplicative inverse when	A. x ≠ 0, y = 0 B. x = 0, y = 0 C. x = 0, y ≠ 0 D. None of these
10	Area bounded between the curve xy=2 and the lines x=1 and x=2	A. ln2 square units B. ln√2 square units C. ln4 square units D. Square units
11	The extraction of cube root of a given number is a	A. Unary Operation B. Binary Operation C. Relation D. None of these
12	w^{73}= _____	A. 0 B. 1 C. w D. w²
13	Question Image	A. 0 B. 1 D. -1
14	Question Image	
15	$\tan^{-1}(1/4) + \tan^{-1}(2/9)$ is equal to	A. 1/2 cos⁻¹(3/5) B. 1/2 sin⁻¹(3/5) C. 1/2 tan⁻¹(3/5) D. tan⁻¹1/2
		A. -sin<span style="color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px; text-align: center; background-color:

		rgb(255, 255, 224);">θ B. cosθ C. sinθ D. -cosθ
16	Question Image	
17	Question Image	
18	Out of 40 consecutive natural numbers, two are chosen at random. Probability that the sum of the numbers is odd, is	A. 14 / 29 B. 20 / 39 C. 1 / 2 D. n
19	Question Image	A. sin h x B. cos h x C. sec h x D. cosec h x
20	If a polynomial p(x) is divided by x-c, then the remainder is	A. p(x) B. x-c C. c D. P(c)