Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. Less then 1 B. Equal to 1 C. Greater than 1 but less then 2 D. Greater then or equal to 2
2	Each complex cube root of unity is square of	A. itself B. 1 C. -1 D. the other
3	Question Image	A. sin h x B. cos h x C. sec h x D. cosec h x
4	(a +b*i*) -c (c +d*i*) =	A. (a +b) = (c +d) B. (a +c) + i(b +d) C. (a -c) + (c -d)i D. (a -c) +(b -d) i
5	If b_1, b_2, b_3, ... are in G.P. with first term unity and common ratio r, then the minimum value of $b_1 - b_3 + b_5$ is equal to	A. 3/4 B. 1/4 C. 1 D. None of these
6	The points (5, -4, 2),(4, -3, 1),(7, -6, 4),(8, -7, 5) are vertices of a	A. Square B. Parallelogram C. Rectangle D. Rhombus
7	For a set A, A∪Ac= ----------	A. A B. ∅ C. Ac D. U
8	Let A is a 3 x 3 matrix and B is its adjoint matrix. If |B| = 64, then |A| =	
9	(x +a)(x +b)(x +c)(x +) = k, k≠0 is reducible to quadratic form only if	A. a+b=c+d B. a+c=b+d C. a+d=b+c D. All are correct
10	In (x + iy), y is called as	A. Imaginary part B. Complex number C. Real part D. None of above
11	Question Image	
12	If u = 2a$\underline{i}$ + $\underline{i}$ - $\underline{k}$ and $\underline{v}$ = $\underline{i}$ +a$\underline{i}$ + 4$\underline{k}$ are perpendicular then a =	A. 4 B. 1/2 C. 3 D. 4/3
13	Question Image	A. 2 B. 7 C. 8 D. 12
14	If x - 1 is a factor of x4 - 5x2 + 4 then other factor is	A. (x + 2)2(x - 1) B. (x + 2)(x - 1)2 C. (x+2)(x2- x- 2) D. (x + 2)2(x - 1)2
15	Question Image	
16	The central angle of an arc of a circle whose length is equal to the radius of the circle is called the	A. degree B. radian C. minute D. second
17	If a_1 and r are the first term and the common ratio respectively then (n + 1)th term of the G.P. is	A. 0 B. a₁rⁿ⁻¹ C. a₁rⁿ⁺¹

		D. a₁rⁿ
18	Onto function is also called	A. Binjective function B. Injective function C. Surjechive function D. None of these
19	The range of function f(x)=-x2+2x-1 is	A. R B. (-∞,0] C. (-∞,1] D. [0,∞)
20	The angles of elevation of the top of a tower at the top and the foot of a pole of height 10 m are 30° and 60° respectively. The height of the tower is	A. 10 m B. 15 m C. 20 m D. None of these