Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If a, b, c are in AP., a, b, c are in G.P. then A, m^2b, c are in	A. A.P. B. G.P. C. H.P. D. None of these
2	To express a single rational fraction as a sum of two or more single rational fractions which are called	A. improper fractions B. Partial fractions C. mixed form D. Polynomials
3	$\sin[\cot^{-1}\{\cos(\tan^{-1}x)\}]=$	
4	Question Image	A. Lies between 4 and 7 B. Lies between 5 and 9 C. Has no value between 4 and 7 D. Has no value between 5 and 9
5	A combination lock on a suitcase has 3 wheels each labeled with nine digits from 1 to 9. If an opening combination is a particular sequence of three digits with no repeats, the probability of a person guessing the right combination is	A. 1 / 500 B. 1 / 504 C. 1 / 252 D. 1 / 250
6	$f(x) = \sin x + \cos^2 x$ is	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
7	The positive value of k for which the equation x2 + kx + 64 = 0 has one of the roots 0	A. 4 B. 64 C. 8 D. All values of k
8	If A = {2m/m^3= 8 , m€ Z} then A =	A. {1,8,27} B. {4} C. (2,4,6} D. {2,16,54}
9	The point _____ is in the solution of the inequality 2x - 3y < 4	A. (0, -2) B. (1, -3) C. (2, 2) D. (3, 0)
10	If the focus lies on the y-axis with coordinates f(0,a) and directrix of the parabola is y = -a, the equation of parabola is:	A. y² = -4 ax B. x² = 4ay C. x² = -4ay D. y² = 4ax
11	An equation which hold good for all values of the variables is called	A. Identity B. fraction C. mixed form D. Partial equation
12	In a school, there are 150 students. Out of these 80 students enrolled for mathematics class, 50 enrolled for English class, and 60 enrolled for Physics class. The students enrolled for English cannot any other class, but the students of mathematics and Physics can take two courses at a time. Find the number of students who have taken both physics and mathematics	A. 40 B. 30 C. 50 D. 20
13	Tangent is a periodic function and its period is _____	A. 2π B. 3π C. <span style="font-family: "Times New Roman"; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color:

		rgb(255, 255, 224);">π D. 4π
14	The additive inverse of 0 is	A. 1 B. -1 C. 0 D. Does not exist
15	The number of the diagonals of a 6 sided figure is	A. 15 B. 21 C. 9 D. 6
16	Question Image	A. 0 B. 1 C. 2 D. 3
17	The points (5, 2, 4)(6, -1, 2) and (8, -7, k) are collinear if k is equal to	A. -2 B. 2 C. 3 D. -1
18	Question Image	A. Polynomial of degree 0 B. Polynomial of degree 1 C. Polynomial of degree 2 D. Polynomial of degree n
19	Optimize means _____ a quantity under certain constraints	A. Minimize B. Maximize C. Maximize or minimize D. None of these
20	The constant distance of all points of the circle from its centre is called the	A. radius of the circle B. secant of the circle C. chord of the circle D. diameter of the circle