Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If n is add the expansion $(a + x)^n$has middle terms	A. 2 B. 3 C. 4 D. 5
2	Let A be a square matrix. Then, 1/2 (A-A') is	A. Skew-symmetric B. Symmetric C. Null D. None of the above
3	Question Image	
4	Question Image	
5	Question Image	D. none of these
6	A square matrix A = [aij] is lower triangular matrix when	A. aij = 0 for all i<j B. bij = 0 C. cij = 0 D. dij = 0
7	The obtuse angle between lines = -2 and y = x +2 is	A. 120° B. 135° C. 150° D. 140°
8	2/9,5/7∈ R,(2⏐9)(5⏐7)=10/63∈R this property is called	A. Associative property B. Identity property C. Commutative property D. Closure property w.r.t multiplication
9	The formula an = arn-1represents	A. nth term of G.P B. Sum of the first n terms C. G.M between a and b D. None of these
10	Associative law of multiplication	A. ab = ba B. a(bc) = (ab) c C. a(b+c) = ab + ac D. (a + b)c = ac + bc
11	x = $\sin^{-1}$ 3, then the value of sin x is	A. √(3/2) B. 3 C. Not possible D. -1
12	sin (α+β) + sin (α-β)	A. 2 sinαcosβ B. sin (2αβ) C. sinαcosα D. None of these
13	Question Image	
14	If the angle between two vectors with magnitude 2 and 15 is 30°then their scalar product is	B. 15 C. 30
		A. 3

15	The maximum value of 12 $\sin\theta$-9 $\sin^2\theta$is x	B. 4 C. 5 D. None of these
16	A box containing 10 mangoes out of which 4 are rotter. Two mangoes are taken together from the box. If one of them is found to be good, the probability that the other is also good is	A. 1 / 3 B. 8 / 15 C. 5 / 13 D. 5 / 9
17	If the vector 2i + 4j - 7k and 2i + 6j + xk are perpendicular then x = ?	A. 0 B. 2 C. 4 D. 7
18	The point _____ is in the solution of the inequality 2x - 3y > 5	A. (1, -1) B. (2,2) C. (0,0) D. (3,0)
19	If A = [a_{ij}] is (m x n) matrix, then transpose of A is of the order	A. m x m B. m x n C. n x n D. n x m
20	Sin 270° = _____	A. -1 B. 0 C. 1 D. Undefined