Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	A and B throw a dice. The probability that A's throw is not greater then B's is	A. 5 / 12 B. 7 / 12 C. 1 / 6 D. 1 / 2
2	Roots of the equation $x^2 + 2x + 3 = 0$ are	A. Real and equal B. Real and distinct C. Complex D. None of these
3	The point of contact of the circles $x^2 + y^2 - 6x - 6y + 10 = 0$ and $x^2 + y^2 = 2$ is	A. (-3 ,2) B. (1 , 3) C. (-2 , -1) D. None of these
4	Question Image	
5	Question Image	
6	The angle of elevation of the top of a tree from a point 17 meters from is foot is 42□ The height of the tree is	A. 12m B. 21m C. 17m D. 15m
7	Question Image	A. cos 3x + c B. - cos 3x + c
8	One root of the equation cos x - x + 1/2 = 0 lies in the interval	
9	Question Image	
10	Latus rectum = 4 x _____	A. focal distance of the vertex B. Chord C. Focus D. 1/2
11	Two matrices A and B are conformable for the product AB if	A. Both A and B are square B. Both A and B are symmetric C. Number of rows of A = number of columns of B D. Number of columns of A = number of rows of B
12	Question Image	
13	If the vertex of the parabola is the origin and directrix is x+5 = 0 . then its latus rectum is:	A. 10 B. 5 C. 0 D. 20
14	$(A \cap B)c =$	A. A∩ B B. (A ∪ B)c C. Ac∪Bc D. Φ
15	Question Image	A. 4 B. 6 C. 8 D. 10
16	For which of the following ordered pairs (s, t) is s + t > 2 and s - t < -3?	A. (3, 2) B. (2, 3) C. (1, 8) D. (0, 3)
17	Question Image	
18	The exact value of cos-1 (0) is	A. π/2 B. -π/2 C. 3π D. π-π/6
		A. 0

| 19 | No term of a harmonic sequence can be | B. 1
C. 2
D. 3 |

| 20 | 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 |