Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The number of subsets of B = {1,2,3,4,5}	A. 10 B. 32 C. 16 D. 5
2	If n is any positive integer then $n! > 2^{n-1}$ for	
3	$3x + 4 \geq 0$ is	A. equation B. inequality C. identity D. none of these
4	Question Image	
5	If $2x^{1/3} + 2x^{-1/3} = 5$, then x is equal to	A. 1 or -1 B. 2 or 1/2 C. 8 or 1/8 D. 4 or 1/4
6	Question Image	A. (1,7/3) B. (1, 7/5) C. (1, 11/7) D. (1, 3/5)
7	A machine operates if all of its three components function. The probability that the first component fails during the year is 0.14, the second component fails is 0.10 and the third component fails is 0.05. the probability that the machine will fail during the year is	A. 0.2647 B. 0.2692 C. 0.3647 D. None of these
8	Question Image	
9	Co-ordinate of a point on the parabola $y^2 = 8x$ whose focal distance is 4 are:	A. (2 , 4) B. (-2 ,-4) C. (-2, 4) D. (2,-4)
10	The Principal value of sin-1 (-1/1/2)	A. π/2<o:p></o:p> B. -π/2<o:p></o:p> C. π<o:p></o:p> D. -π<o:p></o:p>
11	Question Image	A. 3 x 1 B. 1 x 3 C. 3 x 3 D. 1 x 1
12	Which is the proper rational function	
13	Question Image	
14	If $b^2 - 4ac$ is positive then the roots of the equation are	A. Real B. Imaginary C. Positive D. Negative
15	The horizontal distance between the two towers is 60 m. the angular elevation of the top of the taller tower as seen from the top of the shorter one is 30°. If the height of the taller tower is 150 m, the height of the shorter one is	A. 116 m B. 200 m C. 216 m D. None of these
16	A joint equation of the lines through the origin and perpendicular to the lines ax2 +2hxy +by2 =0 is indentical is ax2 +2hxy +by2 =0 if	A. h2 = ab B. a + b =0 C. a = b D. a≠ b E. a = b = 0
17	Question Image	
18	Period of sin x is	

19	Question Image	A. 2x + 3 B. x²+ 3 + c
20	The set of ordered pairs (x,y) such that ax+ by < c, and (x,y) such that ax + by>0, are called	A. Half planes B. Boundary C. Linear Inequalities D. Feasible regions