Mathematics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	
3	Question Image	A. Free vector B. Null vector C. Unit vector D. None of these
4	If the sum of the roots of $(a + 1)x^2 + (2a + 3)x + (3a+4) = 0$ is -1, then product of the roots is	A. 1 B. 2 C. -2 D. -1
5	3/2 is	A. An irrational number B. Whole number C. A positive integer D. A rational number
6	Question Image	
7	Question Image	A. An equation B. Linear equation C. Rational fraction D. Identity
8	Cos 315°=	A. 0.707 B. 0.5 C. 1 D. 0
9	Which of the following integrals can be evaluated	
10	If c is a constant number and if f is the function defined by the equation f(x) = c for all values of x, then f is differentiable at every x and f is defined the equation f(x) = _____	A. f B. 1 C. C D. 0
11	What is a proper rational fraction?	D. All are proper rational fractions
12	Unit vector in the positive direction of x-axis is	D. All
13	The number of ways in which we can courier 5 packets to 10 cities is	A. 2 x 5⁰ B. 5¹⁰ C. 10⁵ D. 2¹⁰
14	The value of the polynomial $3x^3 + 4x^2 - 5x + 4$ at x = -1 is	A. 12 B. 1 C. 10 D. -10
15	Question Image	
16	The gradient of the line joining (1, 4) and (-2, 5) is	A. 3/8 B. -2 2/3 C. -1/3 D. 2
17	Which is not a half plane	A. ax + by < c B. ax + by > c C. Both A and B D. None
18	Multiplicative inverse of "1" is	A. 0 B. <u>+</u> 1 C. 1 D. {0, 1}
19	If $f_1(x)$ and $f_2(x)$ are any two anti derivatives of a function F (x), then the value of $f_1(x) - f_2(x)$ =	A. A variable B. A constant C. undefined D. infinity

20	Question Image