Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If a,β are the roots of ax2+bx+c=0,the equation whose roots are doubled is	A. ay2 +2by+c=0 B. ay2+2by+4c=0 C. ay2+2by+c=0 D. ay2+by+4c=0
2	The equation of the sphere passing thro' (0, 0, 0), (a, 0, 0), (0, b, 0), (9, 0, c) is	A. $x^2 + y^2 + z^2 + 2ax + 2by + 2cz = 0$ B. $x^2 + y^2 + z^2 - 2ax - 2by - 2cz = 0$ C. $x^2 + y^2 + z^2 - ax - by - cz = 0$ D. $x^2 + y^2 + z^2 + ax + by + cz = 0$
3	The total cost of 2 apples and 3 oranges is $1.70, which of the following is true	A. The cost of one apple B. The cost of one orange C. Both have equal cost per item D. Cost of each single item can not be determined
4	For trival solution |A| is	A. A B. |A| is non zero C. A = 0 D. None of these
5	Question Image	A. Principle of equality of fractions B. Rule for product of fractions C. Golden rule of fractions D. Rule for quotient of fractions
6	Question Image	A. quadrant I B. quadrant II C. quadrant III D. quadrant IV
7	The transport of a rectangular matrix is a	A. Square matrix B. Rectangular matrix C. Row matrix D. Column matrix
8	Multiplying each side of an inequality by (-1) will:	A. Not effect B. Change the sign C. Become zero D. Not defined
9	A number H is said to be the H.M. between a and b if a, H, b are in	A. A.P. B. G. P. C. H. P. D. None of these
10	Question Image	A. 5 B. 10 C. 20 D. 30
11	If you are looking a high point from the ground, then the angle formed is	A. Angle of elevation B. Angle of depression C. Right angle D. Horizon
12	The direction cosines of y-axis are	A. 1, 0, 0 B. 0, 1, 0 C. 0, 0, 1 D. 1, 1, 1
13	The polynomial x - a is a factor of the polynomial f(x) if and only if	A. f(a) is positive B. f(a) is negative C. f(a) = 0 D. None of these
14	Question Image	B. $\ln(x^2 - x + 1) + c$ D. ln(2x - 1) + c
		A. 3

15	The magnitude of vector a=i-3j+5k is:	B. √35
		C. √17
		D. √35

16	Question Image	A. c/a
		B. -c/a
		C. b/a
		D. -b/a

| 17 | Question Image | |

| 18 | If the angle between two vectors with magnitude 2 and 15 is 30°then their scalar product is | B. 15 |
| | | C. 30 |

| 19 | Which of the following is skew symmetric matrix | |

| 20 | If P, Q, R be the A.M., G.M., H.M. respectively between any two rational numbers a and b, then P - Q is | |