Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The direction cosines of a line equally inclined with co-ordinate axes are	
2	Question Image	
3	Question Image	
4	Question Image	
5	The extraction of cube root of a given number is a	A. Unary Operation B. Binary Operation C. Relation D. None of these
6	Question Image	
7	The number of real tangents that can be drawn to the ellipse $3x^2 + 5y^2 = 32$ passing thro. (3, 5) is	A. 0 B. 1 C. 2 D. Infinite
8	$\cos 2a =$ _____ ;	A. $\cos^2 a - \sin^2 a$ B. $2\cos^2 a - 1$ C. $1 - 2\sin^2 a$ D. All of these
9	The range of the principle cos function is	
10	Question Image	
11	Question Image	
12	ab > 0 and a > 0 then	A. a > b B. a < b C. a = b D. None
13	$(A \cap Bc)c =$ -----------------------	A. $Ac \cup Bc$ B. $Ac \cup B$ C. $Ac \cap B$ D. None of these
14	The number of words that can be formed out of the letters of the word ASSASSINATION is	
15	Question Image	A. 2 and 9 B. 3 and 2 C. 2/3 and 9 D. 3/2 and 6
16	Question Image	
17	Question Image	
18	In quadratic equation, if the replacement of y with -y leaves the equation unchanged, then the graph is	A. Straight line B. Circle C. Hyperbola D. Symmetric w.r.t.0
19	The equation of line passing through intersection of line x = 0 and y = 0 and the point (2,2) is	A. y = x B. y = x - 1 C. y = x + 1 D. y = x + 1
20	if the value of the sphere, $v = 4/3\pi r^2$, then the which of the following statement is true?	A. r is the function of v B. v is the function of π C. π is independent variable D. None of these