

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	The circle $(x - 2)^2 + (y + 3)^2 = 4$ is not concentric with the circle	A. $(x - 2)^2 + (y + 3)^2 = 9$ B. $(x + 2)^2 + (y - 3)^2 = 4$ C. $(x + 2)^2 + (y - 3)^2 = 8$ D. $(x - 2)^2 + (y + 3)^2 = 5$
3	A combination lock on a suitcase has 3 wheels each labeled with nine digits from 1 to 9. If an opening combination is a particular sequence of three digits with no repeats, the probability of a person guessing the right combination is	A. 1 / 500 B. 1 / 504 C. 1 / 252 D. 1 / 250
4	$a \cdot a^{-1} = a^{-1} \cdot a = 1$ is a	A. Commutative law of multiplication B. Multiplicative identity C. Associative law of multiplication D. Multiplicative inverse
5	The perpendicular bisector of any chord of a circle	A. Passes through the centre of the circle B. Does not pass through the centre of the circle C. May or may not pass through the centre of the circle D. None of these
6	If $z_1 = \sqrt{-36}$, $z_2 = \sqrt{-25}$, $z_3 = \sqrt{-16}$ then	A. 15 B. 15i C. -15i D. -15
7	If the cutting plane is parallel to the axis of the cone and intersects both of its nappes, then the curve of intersection is	A. an ellipse B. a hyperbola C. a circle D. a parabola
8	Question Image	
9	Question Image	D. none of these
10	Order (or sense) of an inequality is changed by multiplying or dividing its each side by a:	A. Zero B. one C. negative constant D. Non negative constant
11	The set X is	A. Proper Subset of X B. Not A subset of X C. Improper Subset of X D. None of these
12	If $ a \times b ^2 + (a, b)^2 = \underline{\hspace{2cm}}$	A. $ a ^2 + b ^2$ B. $ a ^2 - b ^2$ C. $ a ^2 b ^2$ D. None
13	The identity element of a set X with respect to intersection in P(x) is	A. X B. Does not exist C. \emptyset D. None of these
14	The middle term in the expansion of $(a + x)^{12}$ is	A. 7th B. 8th C. 9th D. 6th
15	The equations of the line thro' the point (2, 3, -5) and equally inclined to the axis are	
16	Question Image	
17	Question Image	

18	The physical quantity which possesses both magnitude and direction is called a	<p>A. scalar</p> <p>B. vector</p> <p>C. constant</p> <p>D. none of these</p>
19	$\cos 2\alpha =$	<p>A. $1 - 2 \sin^2 \alpha$</p> <p>B. $\sin^2 \alpha + \cos^2 \alpha$</p> <p>C. $\sin^2 \alpha - \cos^2 \alpha$</p> <p>D. None of these</p>
20	Question Image	<p>A. $\sec 3x + c$</p> <p>B. $-\operatorname{cosec} 3x + c$</p>