

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If the lines $2x-3y-1=0, 3x-y-5=0$ and $3x+py+8=0$ meet at a unique point then	A. $p = -14$ B. $p = -1$ C. $p = 0$ D. $p = 12$
2	$\cos(3\pi/2 + \theta) = \underline{\hspace{2cm}}$;	A. $\sin\theta$ B. $\cos\theta$ C. $-\sin\theta$ D. $-\cos\theta$
3	Equation of the chord of contact to the tangents drawn from $(-3,4)$ to the circle $x^2 + y^2 = 21$	A. $-3x + 4y = 21$ B. $4x - 3y = 0$ C. $-3x + 4y = 25$ D. None of these
4	$(1+w)(1+w^2)(1+w^4)(1+w^8)\dots 50$ factors	A. 0 B. -1 C. 1 D. 2
5	The tangents drawn from the point P to a circle are real and coincident if	A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these
6	The set of all positive even integers is	A. Not a group B. A group w.r.t subtraction C. A group w.r.t division D. A group w.r.t multiplication
7	Which is not included in the domain of $\cos^{-1}x$	A. 0 B. 1 C. -1 D. 2
8	Question Image <input style="width: 100%; height: 15px;" type="text"/>	
9	A box contains 10 red 30 white and 20 black marbles When a marble is drawn at random the probability that it is either red or white is	A. $1/6$ B. $1/3$ C. $1/2$ D. $2/3$
10	The square roots of negative numbers is called	A. Real no B. Complex no C. Positive no D. Negative no
11	The fifth term of an A.P. Whose first term is 5 and common difference is 3, is	A. 20 B. 17 C. 25 D. 30
12	The surface generated by lines, consists of two parts, called:	A. vertex B. apex C. nappes D. axis
13	The set of rational numbers is subset of	A. The set of natural numbers B. The set of real numbers C. The set of integers D. The set of whole numbers
14	Which of the following us a scalar	A. displacement B. velocity C. acceleration D. density
15	A fraction in which the degree of the numerator is less than the degree of the denominator is called	A. Polynomial B. Equation C. Proper fraction D. Improper fraction
16	$(x + 2)^2 = x^2 + 4x + 4$ is	A. A linear equation B. A cubic equation C. A quadratic equation

D. None

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Question Image

- A. $\sin x + c$
- B. $-\sin x + c$
- C. $\cos x + c$
- D. $-\cos x + c$

18

Question Image

- A. $1 + \tan^2 x + c$
- B. $\tan x + c$
- C. $-\tan x + c$
- D. $\cot x + c$

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Question Image

- A. $a = 4, b = 1$
- B. $a = 1, b = -4$
- C. $a = 0, b = 4$
- D. $a = 2, b = 4$

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Rational number is a number which can be written as a terminating decimal fraction or a

- A. Non-terminating decimal fraction
- B. Non-recurring
- C. Recurring decimal fraction
- D. a, b and c