

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	A fraction in which the degree of the numerator is greater than or equal to the degree of the denominator is called	A. A proper fraction B. An improper fraction C. An equation D. An identity
2	The set R is _____ w.r.t subtraction	A. Not a group B. A group C. No conclusion drawn D. Non commutative group
3	A tower subtends an angle of 30° at a point distant d from the foot of the tower and on the same level as the foot of the tower. At a second point, h vertically above the first, the angle of depression of the foot of the tower, is 60° . The height of the tower is	A. $\frac{h}{3}$ B. $\frac{h}{3d}$ C. 3h D. $3h / d$
4	$x = \underline{\hspace{2cm}}$ is in the solution of $2x - 5 > 0$	A. 0 B. 2 C. -2 D. 3
5	A key ring is an example of	A. Permutation B. Circular permutation C. Combination D. None
6	If A, G, H are the arithmetic, geometric and harmonic means between a and b respectively then A, G, H are in	A. A. P. B. G. P. C. H. P. D. None of these
7	When we expand $(a + 2b)^5$ then	A. $a^5 + 10a^4b + 40a^3b^2 + 80a^2b^3 + 80ab^4 + 32b^5$ B. $a^5 + a^4b + a^3b^2 + a^2b^3 + ab^4 + b^5$ C. $5a^5 + 4a^4b + 3a^3b^2 + 2a^2b^3 + ab^4 + b^5$ D. None
8	$\sin(\sin^{-1}(1/2)) =$	A. 0 B. 2 C. ∞ D. $1/2$
9	If $a + b + c = 0$ then which of the following is true	A. $a = b = c = 0$ B. $a = b, c = c, a$ C. $a^2 + b^2 + c^2 = 0$ D. None
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
11	For $f(x) = x^2$, what is the value of $f(a) + f(-a)$ in terms of a?	A. $3a^2$ B. $2a^2$ C. $2a$ D. $-7a$
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 30° B. 60° C. 45° D. None of these
13	Period of $\sin x$ is	
14	64. A point (x, y, z) moves parallel to xy plane. Which of the three variables x, y, z remain fixed?	A. z B. x C. y

15 Question Image

16 $\sin 270^\circ = \underline{\hspace{2cm}}$

- A. -1
- B. 0
- C. 1
- D. Undefined

17 Question Image

18 Question Image

19 The set $\{1, -1, i, -i\}$ form a group under

- A. Addition
- B. Multiplication
- C. Subtraction
- D. None

20 How many arrangements of the letters of the word MISSISSIPPI, taken all together can be made?