

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The order of the differential equation of all conics whose axes coincide with the axes of coordinates is	A. 2 B. 3 C. 4 D. 1
2	If $a + b + c = 0$ then which of the following is true	A. $a = b = c = 0$ B. $a, b = b, c = c, a$ C. $a \times b = b \times c = c \times a$ D. None
3	All letters of the word "AGAIN" are permuted in all possible ways and the words so formed (with or without meaning) are written as in dictionary, then the 50th word is	A. NAAGI B. NAAIG C. IAANG D. INAGA
4	The $n$ th term of a G.P. is	A. $a^{n-1} r^n$ B. $a^{n-1} r^{n+1}$ C. $a^{n-1} r^{n-1}$ D. $a^{n-1} r^{-n}$
5	Through how many radians does the hour hand of a clock turn in one hour	
6	The range of the principle cos function is	
7	Question Image <input type="text"/>	
8	The consecutive terms of a progressions are 30, 24, 20. The next term of the progression is	
9	In school there are 150 students Out of these 80 students enrolled for mathematics class 50 enrolled for English class and 60 enrolled for Physics class The student enrolled for English cannot attend any other class but the students of mathematics and Physics can take two courses at a time Find the number of students who have taken both physics and mathematics.	A. 40 B. 30 C. 50 D. 20
10	Vector additon is:	A. Commutative B. Associative C. Commutative and Associative D. None of these
11	The distance of the point (-2, -3) from the origin is	A. 2 B. -5 C. -3
12	Question Image <input type="text"/>	A. 5 / 12 B. 3 / 8 C. 5 / 8 D. 7 / 4
13	The only function which is both even and odd is	A. $f(x) = \alpha$ B. $f(x) = x$ C. $f(x) = 0$ D. Both A & B
14	For a set A, $A \cup A^c =$ -----	A. A B. $\emptyset$ C. $A^c$ D. U
15	A square matrix $A = [a_{ij}]$ is upper triangular when	A. $c_{ij} = 0$ B. $b_{ij} = 0$ C. $a_{ij} = 0$ for all $i > j$ D. $d_{ij} = 0$
16	H.M. between 3 and 7 is	
17	The set of rationals numbers between 0 and 1 is	A. Finite B. Null set C. Infinite D. None of these
18	Question Image <input type="text"/>	A. $\cos 2x + c$ B. $-\cos 2x + c$ C. $\tan 2x + c$ D. $\cot 2x + c$

D.  $\cot 2x + c$

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If  $a$  and  $b$  are real numbers then  $a+b$  is also real number this law is called

- A. associative law of addition
- B. closure law of addition
- C. Distributive law of addition
- D. Commutative law of addition

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The system of measurement in which the angle is measured in degrees, minutes and seconds is called the

- A. circular system
- B. CGS system
- C. sexagesimal system
- D. none of these