

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. 1 B. 7 C. 4 D. None of these
2	Question Image	
3	The vector $k = [0,0,1]$ is called unit vector along:	A. x -axis B. y - axis C. z- axis D. None of these
4	Question Image	
5	Multiplicative inverse of "1" is	A. +- 1 B. 0 C. 1 D. None of these
6	Question Image	A. $A^{-1}$ B. $A^{-t}$ C. $-A$ D. A
7	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 $\pi$ C. $\pi$ is independent variable D. None of these
8	Every subset of a finite set is	A. Disjoint B. Null C. Finite D. Infinite
9	The set of natural is a semi group w.r.t	A. Addition B. Division C. Subtraction D. None of these
10	Some of two real numbers is also a real number , this property is called:	A. Commutative property w.r.t addition B. Closure property w.r.t. addition C. Associative property w.r.t. addition D. Distributive property w.r.t addition
11	Question Image	
12	The nth term of an A.P., is $12-4n$ . Its common difference is	A. 8 B. 4 C. 4 D. 16
13	What is the period of $\sin 2x/3 \cos 4x$ ?	A. $\pi$ B. $2\pi$ C. $\pi/2$ D. $\pi/3$
14	If S is a sample space and event set $E = \Phi$ then $P(E)$ is	A. $>0$ B. 1 C. $<1$ D. 0
15	$\tan \theta/2$	
16	$A = B$ if	D. A is equivalent to B
17	The proposition $S(k+1)$ is true when _____ is true $\forall K \in \mathbb{N}$	A. $S(n)$ B. $S(k)$ C. $S(1)$ D. $S(k-1)$
18	Question Image	A. $[0, 0, 0]$ B. $[1, 0, 0]$ C. $(1, 1, 1)$

Q. 19, 20  
D. [0, 1]

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19 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

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20 For two vector a and b,  $a+b =$  \_\_\_\_\_

- A. a b
  - B. b+a
  - C. b-a
  - D. None
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