

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
2	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Principle of equality of fractions B. Rule for product of fractions C. Golden rule for fractions D. Rule for quotient of fractions
3	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. (-1, 2) B. (-1, 1) C. (1, 2) D. {-1}
4	Let $S_n$ denote the sum of the first n terms of an A.P. If $S_{2n} = 3 S_n$ ; $S_n$ is equal to	A. 4 B. 6 C. 8 D. 10
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 3K B. K2 C. K3 D. K
6	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $360^\circ$ B. $180^\circ$ C. $90^\circ$ D. None of these
7	$5x^3 + 3x - 1$ is a _____	A. Polynomial of degree 3 B. Polynomial of degree 2 C. Polynomial of degree 1 D. Polynomial of degree 0
8	$\sin(a + \beta) + \sin(a - \beta) =$ _____;	A. $2\cos a \cos \beta$ B. $2\sin a \cos \beta$ C. $2\cos a \sin \beta$ D. $-2\sin a \sin \beta$
9	The complement of set A relative to universal set U is the set	
10	The distance of the point (1,1) from the origin is	A. 0 B. 2
11	The equation $x^2 + y^2 - 8x + 6y + 25 = 0$ represents	A. A circle B. A pair of straight lines C. A point D. None of these
12	If $z_1 = (a,b)$ , $z_2 = (c,d)$ , then $z_1 z_2 =$ -----	A. (ac,bd) B. (ac+bd, ad-bc) C. (ac-bd, ad+bc) D. (ac-bd, ad-bc)
13	If p, q, r and in A.P., a is G.M. between p and q and b is G.M. between q and r, then $a^2, q^2, b^2$ are in	A. A.P. B. G.P. C. H.P. D. None of these
14	The 60th part of one minute is called	A. Degree B. Second C. Radian D. None of these
15	The sum of coefficients in the binomial expansion equals to	A. 2 B. $2^{n+1}$ C. $2^{n-1}$ D. $2^n$
16	The number of divisors of 1029, 1547 and 122 are in	A. A.P. B. G.P. C. H.P. D. None of these
17	Range of $\cos x$ is _____	A. [-1, 1] B. R C. Negative real numbers

$$D. \mathbb{R} - \{x \mid -1 \leq x \leq 1\}$$

18 The quadratic equation  $8 \sec^2 \theta - 6 \sec \theta + 1 = 0$  has

- A. Infinitely many roots
- B. Exactly two roots
- C. Exactly four roots
- D. No roots

19 the curve of the parabola  $y^2 = -4ax$  is symmetric with respect to

- A. x-axis
- B. y-axis
- C. Both x and y-axis
- D. None of these

20  $\tan 30^\circ = \underline{\hspace{2cm}}$