

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The extraction of cube root of a given number is a	A. Unary Operation B. Binary Operation C. Relation D. None of these
2	Question Image	
3	The roots of the equations will be equal if $b^2 - 4ac$ is	A. Positive B. Negative C. 1 D. Zero
4	Question Image	A. Rule of quotient of fraction B. Golden rule of fraction C. Rule for product of fraction D. Principle for equality of fraction
5	Question Image	
6	Question Image	A. 405 / 256 B. 504 / 259 C. 450 / 263 D. None
7	Corner point of the system $x - y \leq 2, x + y \leq 4, 2x - y \leq 6, x \geq 0, y \geq 0$	A. (1,4) B. (4,2) C. (3,1) D. (4,1)
8	Question Image	A. Improper rational fraction B. Rational fraction C. Proper rational fraction D. None of above
9	If a,b,c are three non-coplanar vector then $[a + b, b + c, c + a] = \underline{\hspace{2cm}}$	A. [a.b.c] B. 2[a,b,c] C. [abc]-2 D. 2[abc]2
10	Question Image	A. $\cos 2x + c$ B. $-\cos 2x + c$ C. $\tan 2x + c$ D. $\cot 2x + c$
11	The function discontinuous at $x = 0$ is (I) $\tan x$ (II) $\cot x$ (III) $\sec x$ (iv) $\operatorname{cosec} x$	A. I & III B. I & IV C. II & IV D. II & III
12	There are n seats round a table numbered 1, 2, 3 .... n. The number of ways in which m person can take seats is	A. $\frac{n!}{(n-m)!}$ B. $\frac{n!}{m!}$ C. $\frac{n-1!}{m!}$ D. None of these
13	Question Image	A. $(a + b)^c = a \cdot c + bc$ B. $a + b = b + a$ C. $(a + b) + c = a + (b + c)$ D. $a(b + c) = ab + ac$
14	Question Image	D. none of these
15	In a class of 100 students, 60 drink tea, 50 drink coffee and 30 drink both. A student from his class is selected at takes at last one of 2 drinks is	A. 2 / 5 B. 3 / 5 C. 4 / 5 D. None of these
16	The interval in which $f(x) = x^3 - 6x^2 + 9x$ is increasing	A. $1 < x < 3$ B. $x < 1$ and $x > 3$ C. $x \geq 1$ and $x \leq 3$ D. $-\infty < x < \infty$
17	Question Image	A. 0 B. 1 C. 2

U. 2  
D. None of these

18

Question Image

A. 1.5  
B. 1.2  
C. 8  
D. None of these

19

Question Image

A. 0  
B. 1

20

The radius of the circle  $2x^2 + 2y^2 - 4x + 12y + 11 = 0$  is:

A.  $\sqrt{4.5}$   
B.  $\sqrt{11}$   
C.  $\sqrt{29}$   
D.  $\sqrt{15}$