

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	In common logarithm the base is	A. 1 B. 0 C. 10 D. e
2	How many terms of the A.P 3,6,9,12,15.....must be taken to make the sum 108	A. 8 B. 6 C. 7 D. 36
3	Six boys and 3 girls are to be seated at random, in a row, for a photograph. The probability that no two girls will sit together is	A. 1/12 B. 1/6 C. 5/12 D. 7/12
4	Question Image	
5	The real numbers which satisfy an inequality form its	A. solution B. coefficient C. domain D. range
6	If n is odd then the middle terms in the expansion of $(a + x)^n$ are	
7	If m and n be two scalars, then $(m+n)g =$	A. 0 B. $m+n$ C. $m_a + n_a$ D. $ma - m_a$
8	If the lines $2x-3y-1=0$, $3x-y-5=0$ and $3x+py+8=0$ meet at a unique point then	A. $p = -14$ B. $p = -1$ C. $p = 0$ D. $p = 12$
9	Question Image	
10	Question Image	A. a^x B. $a^x \ln a$
11	The slope of the normal at $(5 \cos \theta, 5 \sin \theta)$ to the circle. $x^2 + y^2 = 25$ is:	A. $\tan \theta$ B. $\cos \theta / \sin \theta$ C. $-\cot \theta$ D. $-\tan \theta$
12	Question Image	
13	The physical quantity which can be specified by a number alongwith unit is called a	A. scalar B. vector C. constant D. none of these
14	The symbol _____ shall be used both for equation and identity	A. $\langle \text{br} \rangle$
15	Question Image	
16	The first three terms in the expansion of $(1 - x)^{-3}$ are	A. $1 + 3x + 6x^2$ B. $1 - 3x + 6x^2$ C. $-3 - 3x - 6x^2$ D. $1 - 3x - 6x^2$
17	The coefficient of the second term of $(a+b)^4$ is	A. 1 B. 9 C. 3 D. 5

18 $\sin(\alpha + \beta) =$

$\cos\beta - \sin\alpha$
 B. $\sin\alpha \cos\beta$
 C. $\sin\alpha \cos\beta - \cos\alpha \sin\beta$
 D. $\sin\alpha \cos\beta + \cos\alpha \sin\beta$

19 The difference of two consecutive terms of an A.P is called the

- A. Common difference
- B. Common ratio
- C. Geometric series
- D. Geometric mean

20 A combination lock on a suitcase has 3 wheels each labeled with nine digits from 1 to 9. If an opening combination is a particular sequence of three digits with no repeats, the probability of a person guessing the right combination is

- A. 1 / 500
- B. 1 / 504
- C. 1 / 252
- D. 1 / 250