

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	A circle which touches one side of a triangle externally and the other two sides produced is called	A. In-circle B. Circumcircle C. e-circle D. Point circle
3	Question Image	
4	Range of $\tan x$ is _____	A. [-1, -] B. \mathbb{R} C. Negative real numbers D. $\mathbb{R} - \{x -1 \leq x \leq 1\}$
5	Another name of quadratic equation is	A. Polynomial B. 2nd degree polynomial C. Linear equation D. simultaneous equations
6	If the sum of even coefficients in the expansion of $(1+x)^n$ is 128 then	A. $n=7$ B. $n=9$ C. $n=8$ D. None
7	If $a_n = 2n - 3$, write the first four terms	A. -3, -1, 1, 3 B. 1, 3, 5, 7 C. -1, 1, 3, 5 D. None of these
8	$(7, 9) + (3, -5) =$	A. (4, 4) B. (10, 4) C. (9, -5) D. (7, 3)
9	If distance between (3,b) and (0,0) is 3 then $b =$ _____	A. 3 C. 9 D. 0
10	Question Image	A. $-\sin \theta$ B. $\cos \theta$ C. $\sin \theta$ D. $-\cos \theta$
11	Domain of $\tan x$ is _____	A. $\sin \alpha$ B. $\cos \alpha$ C. $\tan \alpha$ D. $\cot \alpha$

12 $\sin(\alpha - \beta) =$

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

13 Question Image

14 Question Image

15 Which of the following sets is finite

- A. The set of natural numbers between 3 and 10
- B. The set of rational numbers between 3 and 10
- C. The set of real numbers between 0 and 1
- D. The set of rational numbers between 0 and 1

16 $\tan^{-1}(1/4) + \tan^{-1}(2/9)$ is equal to

- A. $1/2 \cos^{-1}(3/5)$
- B. $1/2 \sin^{-1}(3/5)$
- C. $1/2 \tan^{-1}(3/5)$
- D. $\tan^{-1}(1/2)$

17 Question Image

- A. 2 x 2
- B. 2 x 3
- C. 3 x 2
- D. 3 x 3

18 Question Image

- A. 0
- B. 1
- C. 2
- D. 4

19 If $a > 0, b > 0, c > 0$ then the roots of the equation $ax^2 + bx + c = 0$ are

- A. Real and negative
- B. Non-real with negative real parts
- C. Real and positive
- D. Nothing can be said

20 For any equilateral triangle $r_1 : r_2 : r_3 =$

- A. 1:2:3:4:5
- B. 1:2:3:3:3
- C. 1:2:4:4:4
- D. 2:1 :2 :2 :2