

Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|----|---|--|
| 1 | A circle drawn inside a triangle and touching its sides is called | A. In-circle B. Circum circle C. Escribed circle D. None of these |
| 2 | In R, the additive inverse of a is | A. 0 B. 1 C. -a D. 1/a |
| 3 | If one root of $5x^2 + 13x + k = 0$ be the reciprocal of the other root the value of k is | A. 0 B. 2 C. 1 D. 5 |
| 4 | If a,b,c are unit vectors then $ a + b ^2 + a - b ^2$ | A. 4 B. 8ab C. 9cos D. 4(a,b) |
| 5 | Question Image <input style="width: 100%; height: 15px;" type="text"/> | |
| 6 | The number of arbitrary constants in the general solution of a differential equation is equal to the different equation | A. Order B. Degree C. Variables D. All are correct |
| 7 | The principal value of $\sin^{-1}\sqrt{3/2}$ is | A. $-\pi/3$ B. $\pi/3$ C. $2\pi/3$ D. $\pi/2$ |
| 8 | The area between the x-axis and the curve $y = x^2 + 1$ from $x = 1$ to 2 is: | A. 15/6 B. 15/4 C. 10/4 D. 10/3 |
| 9 | If the terminal rays of an angle falls on any axis then the angle is called | A. Allied angle B. Acute angle C. Standard position D. Quadrantal angle |
| 10 | The magnitude of a vector can never be | A. Zero B. Negative C. Positive D. None of these |
| 11 | The sum of the focal distance from any point on the ellipse $9x^2 + 16y^2 = 144$ is | A. 32 B. 16 C. 18 D. 8 |
| 12 | $i =$ | A. $\sqrt{1}$ B. $\sqrt{2}$ C. $\sqrt{-2}$ D. $\sqrt{-1}$ |
| 13 | The period of $\tan [x/3]$ is _____ | A. 2π B. π C. 3π D. 5π |

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14 The inclination of a line parallel to x-axis is

15 The directrix of $y^2 = -4ax$ is

- A. $y = -a$
- B. $y = a$
- C. $x = a$
- D. $x = -a$

16 Question Image

17 An experiment yields 3 mutually exclusive and exhaustive events A, B, C, if $P(A) = 2$ and $P(B) = 3$. then $P(C) =$

- A. $1 / 11$
- B. $2 / 11$
- C. $3 / 11$
- D. $6 / 11$

18 Question Image

- A. Free vector
- B. Null vector
- C. Unit vector
- D. None of these

19 The domain of the function $y = \sin x$, is

- A. $-\pi/2 \leq x \leq \pi/2$
- B. $\pi/2 \leq x \leq \pi$
- C. $-2\pi \leq x \leq 2\pi$
- D. $-1 \leq x \leq 1$

20 $x = \sin^{-1} 3$, then the value of $\sin x$ is

- A. $\sqrt{3/2}$
- B. 3
- C. Not possible
- D. -1