

Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|----|--|--|
| 1 | The set $(\mathbb{Z}, +)$ forms a group | A. Forms a group w.r.t addition B. Non commutative group w.r.t multiplication C. Forms a group w.r.t multiplication D. Doesn't form a group A. Forms a group w.r.t addition |
| 2 | The area of sector with central angle of 1 radian in a circular region whose radius is 2m is | A. $0.5m^2$ B. $2m^2$ C. $1m^2$ D. $4m^2$ D. $4m^2$ |
| 3 | $\{x x \in \mathbb{R} \wedge x \neq x\}$ is a | A. Infinite set B. Null set C. Finite set D. None of these D. None of these |
| 4 | If the points $(a, 2b), (c, a+b), (2c-a, h)$ lie on the same line then | A. $h=2a$ B. $h=a+b$ C. $h=ab$ D. $h=ac$ A. $h=2a$ |
| 5 | Question Image <input style="width: 100%; height: 20px;" type="text"/> | A. $x = f(y)$ B. $y = f(x)$ C. $x = f(x)$ D. $y = f(y)$ B. $y = f(x)$ |
| 6 | $(a + b) - c - (c + d) =$ | A. $(a + b) = (c + d)$ B. $(a + c) + i(b + d)$ C. $(a - c) + (c - d)$ D. $(a - c) + (b - d)$ A. $(a + b) = (c + d)$ |
| 7 | Question Image <input style="width: 100%; height: 20px;" type="text"/> | D. none of these D. none of these |
| 8 | Question Image <input style="width: 100%; height: 20px;" type="text"/> | A. image B. pre-image C. constant D. none of these A. image |
| 9 | The sum of the odd coefficients in the expansion of $(a + x)^4$ is | A. 14 B. 12 C. 8 D. 4 C. 8 |
| 10 | Question Image <input style="width: 100%; height: 20px;" type="text"/> | A. $\cos 2x + c$ B. $-\cos 2x + c$ C. $\tan 2x + c$ D. $\cot 2x + c$ D. $\cot 2x + c$ |
| 11 | The tangents drawn from the point P to a circle are imaginary if | A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these B. P is inside the circle |
| 12 | Question Image <input style="width: 100%; height: 20px;" type="text"/> | A. Every element of A is in B B. Every element of B is in A C. Every element of A is in B' D. Every element of A is in A A. Every element of A is in B |
| 13 | Tangent is a periodic function and its period is _____ | A. 2π B. 3π C. π D. $\frac{\pi}{2}$ C. π |

rgb(255, 255, 224); ><i>π</i>

D. 4<i>π</i>

14 Question Image

- A. K/6
- B. 2K
- C. 3K
- D. 6K

15 Name the property used in $4.1 + (-4.1) = 0$

- A. Additive inverse
- B. Multiplication inverse
- C. Additive identity
- D. Multiplication identity

16 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

17 $a + x$ is _____

- A. A trinomial
- B. A binomial
- C. A monomial
- D. None of these

18 Question Image

- A. Always negative
- B. Zero
- C. Always positive
- D. Infinity

19 Two unbiased dice are thrown. The probability that the total score is > 5 is

- A. $1 / 18$
- B. $7 / 18$
- C. $13 / 18$
- D. $11 / 18$

20 Question Image