

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Two balanced dice are tossed once, the sample space when the integers on the faces of two dice are the same is	A. $\{(1, 1), (2, 2), (3, 3)\}$ B. $\{(4, 4), (5, 5), (6, 6)\}$ C. $\{(1, 1), (2, 2), (3, 3), (4, 4), (5, 5), (6, 6)\}$ D. None of these
2	In quadratic equation, if the replacement of y with $-y$ leaves the equation unchanged, then the graph is	A. Straight line B. Circle C. Hyperbola D. Symmetric w.r.t.0
3	Period of $\sin 3x$ is _____	
4	If $3x^4 + 4x^3 + x^5$ is divided by $x+1$, which of the following is the remainder	A. 7 B. -2 C. 6 D. 1
5	The sum of all even numbers less than 100 is	A. 2450 B. 2352 C. 2272 D. 2468
6	Question Image <input style="width: 200px; height: 20px;" type="text"/>	A. 0 B. -4 D. none of these
7	In one hour the minute hand of a clock turns through	
8	$2/9, 5/7 \in \mathbb{R}, (2 \mid 9)(5 \mid 7) = 10/63 \in \mathbb{R}$ this property is called	A. Associative property B. Identity property C. Commutative property D. Closure property w.r.t multiplication
9	Power set of difference set $N-W$ is	A. Empty set B. Infinite set C. Singleton set D. $\{0, \emptyset\}$
10	if $Z_1 = 1+i, Z_2 = 2+3i$, then $ Z_2 - Z_1 =$	A. $\sqrt{3} i$ B. $\sqrt{7}$ C. $-2-i$ D. $\sqrt{5}$
11	π is the ration of	A. Area of a circle to its diameter B. Area of a circle to its radius C. Circumference of a circle to its diameter D. Circumference of circle to its radius
12	If S is a sample space and event set $E = S$ then $P(E)$ is	A. >0 B. 1 C. <1 D. 0
13	Question Image <input style="width: 200px; height: 20px;" type="text"/>	C. 1 D. 0
14	An equation which hold good for all values of the variables is called	A. Identity B. fraction C. mixed form D. Partial equation
15	The sum of coefficients in the binomial expansion equals to	A. 2 B. 2^{n+1} C. 2^{n-1} D. 2^n
16	Eight chairs are numbered 1 to 8. Two women and three men wish to occupy one chair each. First, the women choose the chairs from amongst the chairs marked 1 to 4 and then the men select the chairs from amongst the remaining. The number of possible arrangement is	A. ${}^6P_3 \times {}^3P_2$ B. ${}^4P_2 \times {}^4P_3$ C. ${}^4P_2 \times {}^3P_3$ D. ${}^6P_3 \times {}^3P_2$

D. None of these

17 The term involving x^4 in the expansion of $(3 - 2x)^7$ is

- A. 120
- B. 1512
- C. 1250
- D. 15120

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19 $(-28, 12)$ divides the join of $A(-6, 3)$ and $B(5, -2)$ in ratio

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

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- A. A finite set
- B. An infinite set
- C. An empty set
- D. None of these