Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The term involving x4 the expansion (3-2x)7 is	A. 217 x4 B. 15120x4 C. 313x4 D. -25x4
2	$(x^3-1/2x)^6$ is	A. 15/16 x^2 B. 2/13 x^2 C. 17/7 x^2 D. 16/15 x^2
3	$f(x) = 3x/x^2 + 1$ is:	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
4	In set builder notation the set {0,1,2,........100} can be written as	A. {x / xε B $\land$ x ≤ 100} B. {x / x ∈ W $\land$ x < 101} C. {x / x ∈ Z $\land$ x < 101} D. The set of first 100 whole numbers
5	An expression involving any of the symbols <,>,≤ or ≥ is called	A. equation B. inequality C. linear equation D. identity
6	Question Image	A. 5 / 12 B. 3 / 8 C. 5 / 8 D. 7 / 4
7	In a school there are 150 students Out of these 80 students enrolled for mathematics class.50 enrolled for English class and 60 enrolled for Physics class The student enrolled for English cannot attend any other class but the students of mathematics and Physics can take two courses at a time find the number of students who have taken both physics and mathematics.	A. 40 B. 30 C. 50 D. 60
8	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
9	Two cards are drawn at random without replacement. the probability that the first is a king and second is not a king is	A. 48 / 663 B. 24 / 663 C. 12 / 663 D. None of these
10	The set of rationals numbers between 0 and I is	A. Finite B. Null set C. Infinite D. None of these
11	$\forall$ x,y,z ∈ R and z 0,then	A. x > y $\Rightarrow$ xz > yz B. x<y $\Rightarrow$ xz < yz C. x < y $\Rightarrow$ xz > yz D. None of these
12	Domain of cosh x is	A. R B. R -{0} C. [1,∞) D. [0,∞)
13	Which of the following has the same value as i113	A. i B. -1 C. -i D. 1
14	Question Image	
15	Given two independent event A and B such that P(A) = 0.30 and P(B) = 0.60. Probability of getting neither A nor B is	A. 0.28 B. 0.13 C. 0.12 D. 0.42
		A. 3

16	Question Image	B. 1 C. 4

17 How many arrangements of the letters of the word MI SSI PPI, taken all together can be made?

18 Period of sec x is _____

19 $(1+w)(1+w^2)(1+w^4)(1+w^8)....50$ factors

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

20 The range of y = cot x = _____

A. $-\infty > y > +\infty$

B. $-\infty > x > +\infty$

C. $-\infty < y < +\infty$

D. None of above