Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The formula an = a +(n-1)d for an A.P is called	A. nth term of an A.P B. Sum of first n terms C. A,M between a and b D. None of the above
2	The general solution of the differential equation x dy / dx = 1 + y is:	A. 2 B. 1 C. 3 D. None
3	$\cot\theta = \sin 2\theta$ if $\theta =$	
4	The multiplicative inverse of 4 is	A. -4 B. -1/4 C. 1/4 D. 1
5	If for two events A and B , P(A∪B)=1,then events A and B are	A. Certain events B. Mutually exclusive C. Complementary events D. Independent
6	A subset of set of complex number whose elements are of the form (a,0) is called	A. Real number B. Complex number C. Rational number D. Irrational number
7	sin5θ+sin3θ = _____ ;	A. 2sin 4θ cosθ B. 2cos 4θ sinθ C. 2cos 4θ cosθ D. -2sin 4θ sinθ
8	(A∩Bc)c= ------------------------	A. Ac∪Bc B. Ac∪B C. Ac∩B D. None of these
9	Which is an explicit function	A. y = x^2+ 2x - 1 B. x^2+ xy + y^2= 2 C. x^2+ y^2= xy + 2 D. All are
10	Question Image	
11	An integer is chosen at random from the number ranging from 1 to 50. the probability that the integer chosen is a multiple of 2 or 3 or 10 is	A. 3 / 10 B. 5 / 10 C. 7 / 10 D. 9 / 10
12	Question Image	A. -1 B. 0 C. 1 D. None of these
13	Any recurring decimal represents a	A. Irrational no B. Integer C. Rational no D. None of these
14	A function from X to Y is written as	B. f : X to Y D. f : Y to Y
15	If Z = (1,2), then Z^{-1} =?	A. (0.2, 0.4) B. (-0.2 ,0.4) C. (0.2,-0.4) D. (-0.2,-0.4)
16	Composition of functions is	A. Non-commutative (fg ≠ gf) B. non-associative [8(fh) ≠(8f)h] C. Commutative (fg = gf) D. f of-1≠ 1

| 17 | Question Image | A. A = x, B = 1
B. A = 0, B = 2
C. A = -1, B = 1
D. A = x-1, B = x+1 |

| 18 | $w^{29} =$ _____ | A. 0
B. 1
C. w
D. w^2 |

| 19 | For what value of k, 3x -2y+ k= 0 is tangent to the circle x2 +y2 +6x -4y =0 | A. k=0
B. k=0 or 26
C. k = 26
D. k=-13 |

| 20 | Question Image | A. $x^3 - x^2 + x + c$
B. 6x - 2 + c
C. $x^3 - 2x + c$ |