Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$\tan^{-1}x > \cot^{-1}x$ holds for	A. x > 1 B. x < 1 C. x = 1 D. All values of x
2	Question Image	D. none of these
3	$\int Sec^2 (ax + b)\ dx$ is equal to:	A. tan² (ax + b) B. 1/a tan² (ax + b) C. 1/atan (ax +b) D. tan (ax + b)
4	n(n - 1) (n - 2) in factorial form is	
5	Question Image	A. Principle of equality of fractions B. Rule for product of fractions C. Golden rule of fractions D. Rule for quotient of fractions
6	pth term of an H.P. is qr and qth term is pr then the rth term of the H.P. is	A. pqr B. 1 C. pq D. pqr²
7	For two events A and B if P(A) = P (A/B) = 1/4 and P(B/A) = 1/2, then	A. A is sub-event of B B. A and B are mutually exclusive C. A and B are independent and P(A/B) = 3/4 D. None of these
8	If A = |aij| is (m x n) matrix then transpose of A is of the order	A. m x m B. m x n C. n x n D. n x m
9	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
10	Question Image	A. Multiplication property B. Additive property C. Trichotomy property D. Transitive property of inequality
11	Question Image	A. 0 B. 1
12	The period of sin x/2 = Cos x/3 is	A. 2p B. 12p C. 13p D. 7p
13	The distance of the point (-2 , -3) from x-axis is	A. 2 B. -3 C. 3 D. 5
14	The point where the axis meets the parabola is called	A. Directrix B. Foucu C. Chord D. Vertix
15	Question Image	
16	Question Image	D. none of these
17	Power set of X i.e P(X)..........under the binary operation of union U	A. Forms a group B. Does not form a group C. Has no identity element D. Infinite set although X is infinite
18	The obtuse angle between lines = -2 and y = x +2 is	A. 120° B. 135° C. 150°

		C. 150° D. 140°
19	Question Image	
20	∀ a ε R ∃ o ε R such that a + v = 0 + a = a is property of	A. Commutative law of addition B. Associative law of addition C. Additive identity D. Additive inverse