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	
3	The equation of the circle with centre (h, k) and radius r is	A. $(x+h)^2 + (y+k)^2 = r^2$ B. $(x+h)^2 + (y-k)^2 = r^2$ C. $(x-h)^2 + (y+k)^2 = r^2$ D. $(x-h)^2 + (y-k)^2 = r^2$
4	Question Image	
5	Question Image	A. 0 B. abc C. 1/abc D. None of these
6	The distance s of a particle in time t is given by $s = t^3 - 6t^2 - 4t - 8$. Its acceleration vanishes at t =	A. 1 B. 2 C. 3 D. 4
7	If (0,4) and (0,2) are vertex and focus of the parabola respectively, the the equation of the parabola is:	A. $x^2 = 4y - 32$ B. $x^2 = 8y - 32$ C. $y^3 = 16x$ D. $x2 + 8y = 32$
8	Question Image	A. x C. y
9	If A, G, H are the arithmetic, geometric and harmonic means between a and b respectively then A, G, H are in	A. A. P. B. G. P. C. H. P. D. None of these
10	The additive inverse of 2/3 is	A. 3/2 B. -2/3 C. -3/2 D. 0
11	Number of combination of zero or more things out of n different things	A. nPn B. nPr C. nCr D. 2n
12	The number of different ways of describing a set is	A. One B. Two C. Three D. Four
13	Period of tan x is _____	
14	The sum of infinite numbers of terms of an arithmetic series is	A. Finite B. Infinite C. May or may not finite D. None of these
15	If one end of the diameter of the circle $x^2 + y^2 - 5x = 3y - 22 = 0$ is (3,4) the other end is:	A. (2,7) B. (-2,-7) C. (-2,7) D. (2,-7)
16	Question Image	A. 2x cos x2 B. 2sinxcosx C. - sin x2 D. 2x sin x2
		A. Associative property

17	2/9,5/7∈ R,(2│9)(5│7)=10/63∈R this property is called	B. Identity property C. Commutative property D. Closure property w.r.t multiplication
18	The quadratic equation 8 sec2θ - 6 secθ +1 =0 has	A. Infinitely many roots B. Exactly two roots C. Exactly four roots D. No roots
19	Question Image	A. 3/4 B. r C. v D. None of these
20	Question Image	