Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	
3	How many different 5-digit even numbers are possible form digit 1,2,4,6,8	A. 4 : 4! B. 4! C. 5! D. 4!+4!
4	The term involving x^4 in the expansion of $(3 - 2x)^7$ is	A. 120 B. 1512 C. 1250 D. 15120
5	If A is a subset of B and B contains at least one element which is not an element of A, then A is said to be	A. Improper subset of B B. Super set of B C. Proper subset of B D. None of these
6	A tower subtends an angle α at a point on the same level as the root of the tower and at a second point, b meters above the first, the angle of depression of the foot of the tower is β. The height of the tower is	A. b cotαtanβ B. b tanαtanβ C. b tanαcotβ D. None of these
7	If x - 1 is a factor of x4 - 5x2 + 4 then other factor is	A. (x + 2)2(x - 1) B. (x + 2)(x - 1)2 C. (x+2)(x2- x- 2) D. (x + 2)2(x - 1)2
8	If the st. line 3x + 4y = K touches the circle $x^2 + y^2 - 10x = 0$ then the value of K is	A. -1 or 20 B. -10 or 40 C. -2 or 20 D. 2 or 20
9	The principal value of $\sin^{-1}(-1/2)$	A. π/3 B. π/4 C. π/6 D. -π/6
10	The range of y = cot x = _____	A. -∞> y > +∞ B. -∞> x > +<span

		style= font-family: "Times New Roman"; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 248);"><i>∞</i> C. -<i>∞ <</i>y < +<i>∞</i> D. None of above
11	Question Image	
12	The sum of all odd numbers between 100 and 200 is	A. 6200 B. 7500 C. 6500 D. 3750
13	A square matrix A = [aij] is upper triangular when	A. cij = 0 B. bij = 0 C. aij = 0 for all i > j D. dij = 0
14	Question Image	A. 16 / 7 B. 6 / 17 C. 7 / 16 D. None of these
15	i^2 =	A. 1 B. 2 C. -1 D. 0
16	Question Image	
17	The set {-1,1} is closed under the binary operation of	A. Addition B. Multiplication C. Subtraction D. Division
18	The radius of the circle $x^2 + y^2 - 6x + 4y + 13 = 0$, is	A. 1 B. 2 C. 0 D. None of these
19	Question Image	A. 0 B. 1 C. 1/2
20	The point R dividing internally the line joining the points $P(x_1, y_1)$ and $Q(x_2, y_2)$ in the ratio K_1: K_2has the coordinates	