Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	$\pi$is the period of the function	A. |sin x| + |sin x| B. sin⁴x + cos x C. sin (sin x) + sin (cos x) D. None of these
3	The first three terms in the expansion of $(1 - x)^{-1}$are	A. 1 + x + x² B. 1 - x - x² C. -1 -x +x² D. 1 - x + x²
4	An improper rational fraction can be reduced by division to a	A. Proper fraction B. Polynomial C. mixed form
5	The solution of the equation $\cos^2\theta + \sin\theta + 1 = 0$ lies in the interval	
6	Which of the following does not represent absolute value of a vector	A. magnitude B. length C. norm D. number
7	Let $S_n$denote the sum of the first n terms of an A.P. If $S_{2n} = 3\ S_n$: $S_n$is equal to	A. 4 B. 6 C. 8 D. 10
8	The number of combinations of 10 different objects taken 8 objects at a time is	A. 90 B. 45 C. 55 D. 50
9	The points (x, y) which satisfy a linear inequality in two variables x and y from its	A. domain B. range C. solution D. none of these
10	An event having more than one sample point is called	A. Certain event B. Compound event C. Simple event D. None
11	What is the circular measure of the angles between the hands of which at 4 o clock	A. π/6 B. 3π/2 C. π/4 D. 2π/3
12	Question Image	A. 5 C. -5 D. none
13	Question Image	D. None of these
14	If $ax^2 + bx + x = 0$ is satisfied by every value of x, then	A. b = 0, c = 0 B. c = 0 C. b = 0 D. a = b = c = 0
15	How many arrangements of the letters of the word MI SSI PPI, taken all together can be made?	
16	Question Image	
17	If the line 2x -y +k =0 is a diameter of the circle x2 +y2 +6x -6y +5 =0 then k is equal to	A. 12 B. 9 C. 6 D. 3
18	Ifα,β are non-real roots of ax2 + bx +c =0 (a,b,c∈ Q),then	A. α = β B. αβ = 1 C. α = β D. α = 1

19	If b^2- 4ac is positive then the roots of the equation are	A. Real B. Imaginary C. Positive D. Negative
20	The distance of the point (-2 , -3) from y-axis is	A. 2 B. -2 C. 3 D. -3