Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Form a group of 5 men and 3 women, a committee of 4 persons is to be selected randomly. The probability that there is a majority of men is	A. 1/4 B. 1/3 C. 1/2 D. 1/6
2	Question Image	
3	Question Image	A. 16 / 7 B. 6 / 17 C. 7 / 16 D. None of these
4	If the lower limit of an integral is a constant and the upper limit is a variable, then the integral is a	A. Constant function B. Variable value C. Function of upper limit D. All
5	Question Image	A. additive property B. multiplicative property C. additive inverse D. additive identity
6	$\tan^{-1} 1/x =$ _____	A. sin x B. $\sec^{-1} X$ C. $\cot^{-1} X$ D. None of these
7	If for the matrix A, $A^5 = 1$, then $A^{-1} =$	A. A^2 B. A^3 C. A D. None of above
8	Question Image	A. Two real roots B. Two positive roots C. Two negative roots D. One positive and one negative root
9	The seventh term of an A.P whose first term is P and common difference is q. is	A. P-6q B. P+6q C. P-4q D. P-nq
10	ln (x + iy) x is the known as	A. Imaginary part of complex number B. Real part of complex number C. Complex number D. None of above
11	Consider the equation $px^2 + qx + r = 0$ where p,q,r are real The roots are equal in magnitude but opposite in sign when	A. q = 0, r = 0, p ≠ 0 B. p = 0, qr ≠ 0 C. r = 0, pq ≠ 0 D. q = 0, pq ≠ 0
12	The range of y = sin x is _____	A. [1, -1] B. [-1, 1] C. [0, -1] D. [-∞+∞]
13	Question Image	
14	Question Image	
15	Four cards are drawn at random from a pack of 52 playing cards. The probability of getting	A. 44/4165 B. 22/4165

15	all the four cars of the same suit is	C. 11/4165 D. None of these
16	A stationary point x is a relative exterma of y= f(x) is	A. f'' (x) > 0 B. f'' (x) < 0 C. f'' (x) ≠ 0 D. f''(x) = 0
17	Inverse of the function y-10x is	A. y=logx B. y=lnx C. x=10y D. x=10y
18	The solution of the quadratic equation x2 -7x + 10=0, is	A. 2 B. 5 C. 2,5 D. 7
19	Question Image	
20	Out of 40 consecutive natural numbers, two are chosen at random. Probability that the sum of the numbers is odd, is	A. 14 / 29 B. 20 / 39 C. 1 / 2 D. n