Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The product of the four fourth roots of unity is	A. 0 B. 1 C. -1 D. None of these
2	If Sn is a definite number as $n \to \infty$,then the geometric series is	A. Convergent B. Divergent C. Oscillatroy D. None of these
3	Question Image	A. Improper rational fraction B. Proper rational fraction C. Polynomial D. Equation
4	The general solution of the differential equation $x\, dy / dx = 1 + y$ is:	A. 2 B. 1 C. 3 D. None
5	If $f(x) = -x^3$ then f(-2) is	A. -2 B. -4 C. -8 D. 8
6	Question Image	
7	Question Image	
8	If 2 and 2 are x and y components of vector then its angle with x-axis is	A. $30°$ B. $45°$ C. $60°$ D. $90°$
9	The expansion $(1 + x)^{-3}$ holds when	A. $|x| > 1$ B. $|x| < 1$ C. $x < 1$ D. $x > 1$
10	The multiplicative inverse of x such that x = 0 is	A. -x B. Does not exist C. 1/x D. ±1
11	Question Image	
12	tan 294° =_____;	A. tan 24° B. -tan 24° C. cot 24° D. -cot 24°
13	Question Image	A. $y + 1 = Ae^x$ B. $y + 1 = Axe^x$ C. $xe^x = C$ D. $y + xe^x = C$
14	The order of the matrix A is 3 x 2 and that of B is 2 x 3. The order of the matrix BA is	A. 3 x 3 B. 3 x 2 C. 2 x 5 D. 5 x 2
15	Question Image	A. 8 C. 4 D. 64
		A. Symmetric property

16	Question Image	B. Cancellation property w.r.t. multiplication C. Reflexive property D. Transitive property
17	Each point of the feasible region is called	A. Solution B. feasible solution C. Both a & b D. None
18	The equation of the circle with centre (5, -2) and radius 4 is	A. $(x-5)^2 + (y+2)^2 = 16$ B. $(x-5)^2 + (y+2)^2 = 4$ C. $(x-5)^2 + (y-2)^2 = 16$ D. $(x-5)^2 + (y-2)^2 = 4$
19	Question Image	
20	Question Image	D. both a & c