

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	To each element of a group there corresponds inverse element	A. Two B. One C. No D. Three
2	Question Image	
3	$\sin^{-1}(\sin 2\pi/3) =$	A. $\pi/2$ B. $2\pi/3$ C. $-3\pi/2$ D. $\pi/3$
4	A vector of magnitude zero is called	A. Position vector B. Null vector C. Free vector D. None of these
5	If the 4th term in the expansion of $(px + x^{-1})^m$ is 2.5 for all $x \in R$, then	
6	Question Image	
7	Both the roots of the equation $(x - b)(x - c) + (x - c)(x - a) + (x - a)(x - b) = 0$ are always	A. Positive B. Negative C. Real D. None of these
8	Let A,B, and C be any sets such that $A \cup B = A \cup C$ and $A \cap B = A \cap C$ then	A. $A \neq C$ B. $B = C$ C. $A = B$ D. $A \neq B$
9	Question Image	
10	The study conics, pappus used the method of:	A. analytic geometry Euclidean B. solid geometry C. Greek mathematicians D. None of these
11	Question Image	
12	Question Image	
13	For two events A and B if $P(A) = P(A/B) = 1/4$ and $P(B/A) = 1/2$, then	A. A is sub-event of B B. A and B are mutually exclusive C. A and B are independent and $P(A/B) = 3/4$ D. None of these
14	Question Image	A. Always negative B. Zero C. Always positive D. Infinity
15	The probability that a person A will be alive 15 years hence is 5/7 and the probability that another person B will be alive 15 years hence is 7/9. Find the probability that both will be alive 15 years hence	A. 4/63 B. 5/9 C. 45/49 D. None of these
16	Question Image	
17	The greatest integer which divides the number $101^{100} - 1$ is	A. 100 B. 1000 C. 10000 D. 100000
18	Question Image	
19	(1, 1) is the in the solution of the inequality	A. $3x + 4y \geq 3$ B. $2x + 3y \leq 2$ C. $4x = 3y \geq 5$ D. $2c - 3y \geq 2$
20	Question Image	

