

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. Reflexive property B. Symmetric property C. Cancellations property w.r.t. addition D. Transitive property
2	If e, e' be the eccentricities of two conics $S=0$ and $S'=0$ and if $e^2 + e'^2 = 3$ then both S and S' can be	A. Hyperbola B. Parabolas C. Ellipses D. None of these
3	In a school there are 150 students Out of these 80 students enrolled for mathematics class. 50 enrolled for English class and 60 enrolled for Physics class The student enrolled for English cannot attend any other class but the students of mathematics and Physics can take two courses at a time find the number of students who have taken both physics and mathematics.	A. 40 B. 30 C. 50 D. 60
4	20. 19. 18. 17= _____	
5	Question Image	
6	Question Image	A. $a \sec(ax + b) + c$ B. $- a \sec(ax + b) + c$
7	Tan $2\theta =$	
8	In a triangle if $\alpha > 45^\circ, \beta > 30^\circ$ then γ cannot be	A. 90° B. 100° C. 10° D. 120°
9	The order of the matrix A is 3×2 and that of B is 2×3 . The order of the matrix BA is	A. 3×3 B. 3×2 C. 2×5 D. 5×2
10	Question Image	D. none of these
11	Write down the power set of $\{9, 11\}$	
12	Question Image	
13	Question Image	
14	If $w+2$ is a root of $(x+1)(x+2)(x+3)(x+4) = k$, then	A. $k=0$ B. $k=1$ C. $k=w$ D. $k=w^2$
15	Which is not included in the domain of $\cos^{-1}x$	A. 0 B. 1 C. -1 D. 2
16	Question Image	A. 0 B. 1 D. undefined
17	If the trace of matrix A is 5, then the trace of the matrix $3A$ is	A. $3/5$ B. $5/3$ C. 8 D. 15
18	Question Image	
19	An infinite arithmetic series is always	A. Convergent B. Oscillatory C. Divergent D. None of these
20	The probability to get an odd number in a dice thrown once is	A. $1/2$ B. $1/6$ C. $1/3$

