

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Two sets A and B are said to be disjoint if	
2	Number of ways of writing the letters of WORD taken all at a time is	A. 24 B. 4 C. 12 D. 6
3	If the roots of $ax^2 + bx + c = 0$ ( $a > 0$ ) be greater than unity, then	A. $a + b + c = 0$ B. $a + b + c > 0$ C. $a + b + c < 0$ D. None of these
4	The points (5, 0, 2), (2, -6, 0), (4, -9, 6) and (7, -3, 8) are vertices of a	A. Square B. Rhombus C. Rectangle D. Parallelogram
5	When a selection of object is made without paying regard to the order of selection, it is called	A. Sequence B. Series C. Combination D. Permutation
6	A number A is said to be the A.M between the two numbers a and b if a, A, b are in	A. A.M B. A.P C. G.P D. G.M
7	Question Image <input type="text"/>	
8	$\tan (-135^\circ) = \theta$	A. 0 B. 1 C. 2 D. 3
9	No term of a harmonic sequence can be	A. 0 B. 1 C. 2 D. 3
10	The perimeter of a sector of a central angle of measure 1 radian out off an are of length 35cm is	A. 35 cm B. 70 cm C. 140 cm D. 105 cm
11	Given X,Y are any two sets such that number of elements in X = 18, number of elements in set Y = 24, and number of elements in set $X \cup Y = 40$ , then number of elements in set $X \cap Y =$	A. 3 B. 1 C. 2 D. 4
12	The ratio in which the line $y - x + 2 = 0$ divides the line joining (3,-1) and (8,9) is	A. 2:3 B. -2:3 C. 3:2 D. -3:2
13	Question Image <input type="text"/>	D. none of these
14	Question Image <input type="text"/>	
15	$(f \circ g)'(x) = f'(g(x))g'(x)$ is derivative by	A. Chain rule B. Reciprocal rule C. Power rule D. Product rule
16	Equation of parabola with focus F(-3,1) directrix $x=3$ is	A. $(y - 1)^2 = -12x$ B. $(y - 1)^2 = 4x$ C. $(x + 3)^2 = 4a(y - 1)$ D. $y^2 = -12(x - 1)$
17	Question Image <input type="text"/>	A. 15 B. 15 i C. -15 i D. -15
		A. $x^{\sup>39</sup>}$

- 18 Question Image  B.  $40x^{39}$   
C.  $40x^{41}$   
D. none of these
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- 19 The set of even prime numbers is A. {2,4,6,8,10}  
B. {2,4,6,8,10,12}  
C. {1,3,5,7,9}  
D. {2}
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- 20 The position vector of a point (x, y) in xy plane is D. none of these
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