

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	D. none of these
2	A line joining two distinct points on a parabola is called a _____ of the parabola.	A. Chord B. Tangent C. Lust rectum D. directrix
3	Out of 10, 000 families with 4 children each, the number of families all of whose children are daughters is	A. 375 B. 500 C. 625 D. 150
4	The set of rational number is represented by	A. W B. R C. Q' D. $\mathbb{Q}$
5	(0,1) is in the solution of the inequality	A. $3x + 2y > 8$ B. $2x - 3y < 4$ C. $2x + 3y > 5$ D. $x - 2y < -5$
6	Question Image	A. 1 B. -1  A. $\sin \alpha \cos \beta$ B. $\sin \alpha \sin \beta$ C. $\sin \alpha \cos \beta$ D. $\sin \alpha \sin \beta$
7	$\sin(\alpha + \beta) =$	A. $\sin \alpha \cos \beta$ B. $\sin \alpha \sin \beta$ C. $\sin \alpha \cos \beta$ D. $\sin \alpha \sin \beta$

family: &quot; Times New Roman&quot;; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 224);><i> $\beta$ </i></span>  
D.  $\sin^2 \alpha + \cos^2 \beta$   
&quot; Times New Roman&quot;; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 224);><i> $\alpha$ </i></span>  
</span> $\cos^2 \alpha + \sin^2 \beta$   
&quot; Times New Roman&quot;; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 224);><i> $\beta$ </i></span>

8 Matrices  $A = [a_{ij}]_{2 \times 3}$  and  $B = [b_{ij}]_{3 \times 2}$  are suitable for  
A.  $BA$   
B.  $A^2$   
C.  $AB$   
D.  $B^2$

9  $\sin^2 \pi/6 + \sin^2 \pi/3 + \tan^2 \pi/4 =$  \_\_\_\_\_;  
A. 1  
B. 2  
C. 3  
D. 4

10 The domain of the principal tan function is

11 Which of the following is not a quadrantal angle  
A.  $90^\circ$   
B.  $100^\circ$   
C.  $180^\circ$   
D.  $270^\circ$

12

13 The 7th term of the A.P 7, 11, 15, is  
A. 24  
B. 31  
C. 26  
D. 23

14 The matrix  $A = [a_{ij}]_{m \times n}$  with  $m \neq n$  is always  
A. Symmetric  
B. Hermition  
C. Skew-symmetric  
D. None

15 The set  $\{a, b\}$  is  
A. Infinite set  
B. Singleton set  
C. Two points set  
D. None

16  $(ABC)'$  =  
A.  $CBA'$   
B.  $CBA$   
C.  $C'B'A$   
D.  $C'B'A'$

17 How many terms of the A.P 3, 6, 9, 12, 15, ..... must be taken to make the sum 108  
A. 8  
B. 6  
C. 7  
D. 36

18 The mid point of the line joining the points  $P(x_1, y_1)$  and  $Q(x_2, y_2)$  is

19 An integer is chosen at random from the number ranging from 1 to 50. the probability that the integer chosen is a multiple of 2 or 3 or 10 is  
A.  $3/10$   
B.  $5/10$   
C.  $7/10$   
D.  $9/10$

20 The set  $R$  is .....w.r.t subtraction  
A. Not a group  
B. A group  
C. No conclusion drawn  
D. Non commutative group