

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If $\theta = 60^\circ$ then	<p>A. <math>\sin \theta = \frac{1}{2}</math></p> <p>B. <math>\tan \theta = \cot 30^\circ</math></p> <p>C. <math>\sec \theta = \frac{1}{4}</math></p> <p>D. <math>\sec \theta = 4</math></p>
2	Question Image	<p>A. An empty set</p> <p>B. Universal set</p> <p>C. A singleton set</p> <p>D. None of these</p>
3	5th term of a G.P. is 2, then the product of first 9 terms is	<p>A. 256</p> <p>B. 128</p> <p>C. 512</p> <p>D. None of these</p>
4	What is the period of $\sin 2x/3 \cos 4x$ ?	<p>A. <math>\pi</math></p> <p>B. <math>2\pi</math></p> <p>C. <math>\pi/2</math></p> <p>D. <math>\pi/3</math></p>
5	Question Image	<p>A. 5</p> <p>B. 25</p> <p>D. 3</p>
6	The set of the first elements of the orders pairs forming a relations is called its	<p>A. Relation in B</p> <p>B. Range</p> <p>C. Domain</p> <p>D. Relation in A</p>
7	Question Image	
8	If $n(X) = 18$ , $n(X \cap Y) = 7$ , $n(X \cup Y) = 40$ then $n(Y) =$	<p>A. 1</p> <p>B. 12</p> <p>C. 5</p> <p>D. 29</p>
9	The number of terms in the expansion of $(a + b)^9$ is	<p>A. 10</p> <p>B. 11</p> <p>C. 9</p> <p>D. 12</p>
10	The equation $ x + 4  = x$ has solution	<p>A. <math>x = -2</math></p> <p>B. <math>x = 2</math></p> <p>C. <math>x = -4</math></p> <p>D. <math>x = 4</math></p>
11	Question Image	<p>A. <math>c = 0</math></p> <p>B. <math>c = -1</math></p> <p>C. <math>c = -2</math></p>

D.  $c = 1$

12 Question Image D. none of these

13 The number of different ways of describing a set is  
A. One  
B. Two  
C. Three  
D. Four

14 The first three terms in the expansion of  $(1 + x)^{-1}$  are  
A.  $1 + x + x^2$   
B.  $1 - x - x^2$   
C.  $-1 - x + x^2$   
D.  $1 - x + x^2$

15 Domain of  $\tan x$  is \_\_\_\_\_

16 If  $0 < a < \pi/2$ , then the additive inverse of  $\sin a$  is  
A.  $1/9$   
B.  $\sin(1/9)$   
C.  $a$   
D.  $-a$

17 The parabola  $y^2 = 4x$  is symmetric about  
A. x-axis  
B. y-axis  
C. Both x and y-axis  
D. The line  $y = x$

18 If a 1-1 correspondence can be established b/w two sets A and B, then they are called  
A. Equal sets  
B. Equivalent sets  
C. Overlapping sets  
D. None of these

19 To each element of a group there corresponds ..... inverse element  
A. Two  
B. One  
C. No  
D. Three

20 Question Image  
A.  $A = C$   
B.  $A = B$   
C.  $B = C$   
D. None of these