

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$30^\circ = \underline{\hspace{2cm}}$	
2	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
3	$120^\circ$ degrees are equal to how many radians?	
4	If $a > 0, b > 0, c > 0$ , then the roots of the equation $ax^2 + bx + c = 0$ are	A. Real and negative <b>B. Non-real with negative real parts</b> C. Real and positive D. Nothing can be said
5	$i^2 =$	A. 1 B. 2 <b>C. -1</b> D. 0
6	Rational number is a number which can be written as a terminating decimal fraction or a	A. Non-terminating decimal fraction B. Non-recurring <b>C. Recurring decimal fraction</b> D. a, b and c
7	The distance between the points $(0, 0)$ and $(2, 1)$ is	A. 5 C. 0 D. 3
8	If $kx^2 + 2hxy - 4y^2 = 0$ represents two perpendicular lines then	A. $k = 2$ <b>B. <math>k = \pm 2</math></b> C. $k = -2$ D. $k \neq 0$
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $\sec x \tan x$ <b>B. <math>-\operatorname{cosec} x \cot x</math></b> C. $\sec^2 x$ D. $-\sin x$
10	What is the period of $\sin 2x/3 \cos 4x$ ?	<b>A. <math>\pi</math></b> B. $2\pi$ C. $\pi/2$ D. $\pi/3$
11	$2\pi$ is the period of	<b>A. <math>\sin x</math></b> B. $\tan x$ C. $\cot x$ D. all circular function
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
13	The factorial of a positive integers is a (an)	A. Rational number <b>B. Positive integer</b> C. Real number D. None
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $3/4$ <b>B. <math>-3/4</math></b> C. $4/3$ D. $-4/3$
15	The mid point of the line segment joining the points $(3,-1)$ and $(-3,1)$ is	A. $(3,-1)$ <b>B. <math>(0,0)</math></b> C. $(2,2)$ D. $(4,4)$
16	The equation of vertical asymptotes of $y = \cos ecx$ is	<b>A. <math>x = 0</math></b> B. $y = 0$ C. $x = \infty$ D. $y = \infty$
17	If $f(x) = 2x+1$ then $f \circ f(x) = \underline{\hspace{2cm}}$ ;	<b>A. <math>4x+3</math></b> B. $2x+3$ C. $4x+1$ D. None of these
18	Question Image <input style="width: 500px; height: 20px;" type="text"/>	<b>A. 20</b> B. 10 C. 0

C.  $\cup$   
D. None of these

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19 A square matrix all of whose elements except the main diagonal are zeros is called a

- A. Null matrix
- B. Singular matrix
- C. Symmetric matrix
- D. Diagonal matrix

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20 The equation  $|x + 4| = x$  has solution

- A.  $x = -2$
  - B.  $x = 2$
  - C.  $x = -4$
  - D.  $x = 4$
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