

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	AB is a vertical pole and C is its middle point. The end A is on the level ground and P is any point on the level ground other than A. the portion CB subtends an angle β at P. If $AP : AB = 2 : 1$ then $\beta =$	
2	$\cos (180^\circ - \theta) =$	<p>A. $\sin \theta$</p> <p>B. $-\cos \theta$</p> <p>C. $-\sin \theta$</p> <p>D. None of above</p>
3	If $\sin 6\theta + \sin 4\theta + \sin 2\theta = 0$, then $\theta =$	
4	The general solution of the differential equation $x \, dy / dx = 1 + y$ is:	<p>A. 2</p> <p>B. 1</p> <p>C. 3</p> <p>D. None</p>
5	A sequence of number whose reciprocals form an arithmetic sequence is called	<p>A. Geometric sequence</p> <p>B. Arithmetic series</p> <p>C. Harmonic sequence</p> <p>D. Harmonic series</p>
6	$\cos 2\alpha =$	<p>A. $1 - 2 \sin^2 \alpha$</p> <p>B. $\sin^2 \alpha + \cos^2 \alpha$</p> <p>C. $\sin^2 \alpha - \cos^2 \alpha$</p> <p>D. None of these</p>
7	If n is odd then the middle terms in the expansion of $(a + x)^n$ are	
8	Question Image <input type="text"/>	<p>A. $a \cos(ax + b) + c$</p> <p>B. $-a \cos(ax + b) + c$</p>
9	E-radius corresponding to $\angle B$ is	
10	The extraction of cube root of a given number is a	<p>A. Unary Operation</p> <p>B. Binary Operation</p> <p>C. Relation</p> <p>D. None of these</p>
11	Question Image <input type="text"/>	<p>D. none of these</p>
12	$\cos 2\alpha =$	<p>A. $-2 \sin^2 \alpha$</p> <p>B. $2 \sin^2 \alpha$</p> <p>C. $-2 \sin^2 \alpha$</p>

$$\cos(\alpha + \beta) - \cos(\alpha - \beta) =$$

" Times New Roman"; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 224);><i></i>cos<i></i> D. 4 sin<i></i> cos<i style="text-align: center;"></i>

13

Question Image

- A. $c = 0$
 B. $c = -1$
 C. $c = -2$
 D. $c = 1$

14

If n is any positive integer then $n^2 > n + 3$ for

15

Period of $3 \sin x$ is _____

16

Question Image

17

Question Image

18

Question Image

- A. quadratic function
 B. constant function
 C. linear function
 D. exponential function

19

Matrices are represented by

- A. Natural numbers
 B. Real numbers
 C. Small letters
 D. Capital letters

20

Which one is quadrantal angle

- A. 8181710°
 B. 2345°
 C. -8181180°
 D. -2344°