

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	<p>A. π</p> <p>B. 2π</p> <p>C. $\pi/2$</p> <p>D. None of these</p>
2	Question Image	
3	Question Image	
4	$\operatorname{Cosec} 60^\circ =$ _____	
5	$\{0\}$ is a	<p>A. Empty set</p> <p>B. Singleton set</p> <p>C. Zero set</p> <p>D. Null Set</p>
6	Sand falls from a tube in such a way that it forms a cone whose height is always $4/3$ times the radius of its base and radius of the base increases at the rate of $1/8$ cm/sec. When this radius is 1 meter, the rate at which the amount of sand increases is	
7	$i^{(4n+2)} =$ _____	<p>A. 1</p> <p>B. i</p> <p>C. -1</p> <p>D. -i</p>
8	Question Image	
9	$\int x \sin x dx$ is equal to:	<p>A. $\sin x + \cos x$</p> <p>B. $\sin x - \cos x$</p> <p>C. $x \cos x + \sin x$</p> <p>D. $-x \cos x + \sin x$</p>
10	An equation containing at least one derivative of a depends variable with respect to independent variable is a (an)	<p>A. Implicit equation</p> <p>B. Differential equation</p> <p>C. General equation</p> <p>D. None of these</p>
11	$xy = 2$ is:	<p>A. a constant function</p> <p>B. an identity function</p> <p>C. an improper function</p> <p>D. implicit function</p>
12	The sum of the squares of three distinct real numbers, which are in G.P., is S^2 . if their sum is αS then	
13	Question Image	
14	The angles of elevation of the top of a tower at the top and the foot of a pole of height 10 m are 30° and 60° respectively. The height of the tower is	<p>A. 10 m</p> <p>B. 15 m</p> <p>C. 20 m</p> <p>D. None of these</p>
15	Question Image	
16	Question Image	
17	In a triangle if $\alpha > 45^\circ, \beta > 30^\circ$ then γ cannot be	<p>A. 90°</p> <p>B. 100°</p> <p>C. 10°</p> <p>D. 120°</p>
18	$a > b, b > c \Rightarrow a > c$ is a	<p>A. Multiplicative property</p> <p>B. Additive property</p> <p>C. Trichotomy property</p> <p>D. Transitive property of inequality</p>

19	The period of $\tan x/7$ is	A. 3π B. 7π C. 15π D. 5π
20	The slope of y-axis is	A. 0 B. undefined C. 1