

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If $\sin(\pi \cos \theta) = \cos(\pi \sin \theta)$, then which of the following is correct?	
2	If the circumference of a circle is divided into 360 congruent parts, the angle subtended by one part at the centre of the circle is	A. 1° B. $1'$ C. $1''$ D. 1 rad
3	Question Image	
4	$(\sqrt{3} + \sqrt{5}) + \sqrt{7} = \sqrt{3} + (\sqrt{5} + \sqrt{7})$ property used in above is	A. Commutative property of addition B. Closure property of addition C. Additive inverse D. Associative property w.r.t to addition
5	Question Image	D. all are correct
6	Question Image	D. none of these
7	If t is the parameter for one end of a focal chord of the parabola $y^2 = 4ax$, then its length is	
8	The angle of elevation of a tower from a point A due south of it is x and from a point B due east of A is y. If AB = 1, then the height h of the tower is given by	
9	A series consisting of an unlimited number of terms is termed as an	A. Finite sequence B. Infinite sequence C. Infinite series D. geometric sequence
10	If $B - A \neq \emptyset$, then $n(B - A)$ is equal to	A. $n(A) + n(C)$ B. $n(C) - n(A)$ C. $n(A) - n(C)$ D. None of these
11	2π is the period of	A. $\sin x$ B. $\tan x$ C. $\cot x$ D. all circular function
12	Question Image	D. both a & c
13	The roots of the equation $ax^2 + bx + c = 0$ are real and distinct if	A. $b^2 - 4ac < 0$ B. $b^2 - 4ac = 0$ C. $b^2 - 4ac > 0$ D. None of these
14	The number of combinations of 10 different objects taken 8 objects at a time is	A. 90 B. 45 C. 55 D. 50
15	The 7th term of the A.P 7, 11, 15, is	A. 24 B. 31 C. 26 D. 23
16	The exact value of $\cos^{-1}(0)$ is	A. $\pi/2$ B. $-\pi/2$ C. 3π D. $\pi - \pi/6$
17	Sum of two quantities is at least 20 is denoted by	A. $x + y = 20$ B. $x + y \geq 20$ C. $x + y \neq 20$ D. $x + y \leq 20$
18	Question Image	
19	A fixed point which lies on the axis of the cone is called its:	A. axis B. apex C. plane D. diameter

Given two numbers a and b . Let A denote the single A.M. between these and S denote the sum of n A.M.'s between them. Then S/A depends upon

- A. n, a, b
- B. n, a
- C. n, b
- D. n