

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	A fraction in which the degree of the numerator is less than the degree of the denominator is called	A. Polynomial B. Equation C. Proper fraction D. Improper fraction
2	Question Image	
3	Question Image	A. 8 C. 4 D. 64
4	The cube roots of 8 are	
5	Range of $y = \sec x$ is	A. $-1 \leq y \leq 1$ B. $y \geq 1$ or $y \leq -1$ C. $y \leq 1$ or $y \geq -1$ D. $-\infty < y < +\infty$
6	If line through (4,3) and (2,k) is perpendicular to $y = 2x + 3$, then $k =$ _____	A. -1 B. 1 C. -4 D. 4
7	Two circles are said to be concentric if they have	A. same radius B. same chord C. same centre D. same diameter
8	Question Image	A. Reflexive property B. Symmetric property C. Transitive property D. Additive property
9	Question Image	
10	Question Image	
11	Question Image	
12	The condition for polynomial equation $ax^2 + bx + c = 0$ to be quadratic is	A. $a > 0$ B. $a < 0$ C. $a \neq 0$ D. $a \neq 0, b \neq 0$
13	Question Image	A. $(a - c)^2 + b^2 = c^2$ B. $(a - c)^2 + b^2 = c^2$ C. $(a + c)^2 + b^2 = c^2$ D. $(a + c)^2 + b^2 = c^2$
14	The solution of differential equation:	A. $\frac{dy}{dx} + \frac{y}{x} = x^2$ is : B. $4xy = x^4 + c$ C. $4x = x^4 + c$ D. $4y = x^4 + c$ E. $4x = 4x^3 + c$
15	Question Image	
16	Question Image	A. 11 B. 61 D. 1
17	The period of $\cos(7x-5)$ is	A. $\pi/7$ B. $7\pi/2$ C. $\pi/2$ D. $2\pi/7$
18	Question Image	A. 16 / 7 B. 6 / 17 C. 7 / 16 D. 16 / 17

D. None of these

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Question Image

- A. 3, -3, 11
- B. 3, 3, 11
- C. -3, 3, -11
- D. -3, -3, 11

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What is the 26th term of the sequence, if its general term is $a_n = (-1)^{n+1}$

- A. 2
- B. 26
- C. 27
- D. 1