

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	In one hour the minute hand of a clock turns through	
2	A quadratic equation in x is an equation that can be written in the form	A. $ax^2 + b = 0$ B. $ax^3 + b^2 + c = 0$ C. $ax^2 + bx + c = 0$ D. $ax^3 + b^3 + cx = 0$
3	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $\cos 2x = \sin 4y$ B. $\cos 4y = \cos 2x$ C. $\cos 3y = \sin 4x$ D. None of these
4	Which one is not defined $\forall n \in \mathbb{Z}^+$	A. $-n!$ B. $n!$ C. $(-n)!$ D. $n! + 0! = n! + 1$
5	If $c = 2i + j + k$ and $d = -1 + 4j + 2k$, then $[c-d]$	A. $\sqrt{7}$ B. $\sqrt{41}$ C. $\sqrt{19}$ D. $\sqrt{2 \& 7}$
6	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. -1 C. 1 D. 2
8	Riaz, Saba, Maria, Shehzad are to give speeches in a class. The teacher can arrange the order of their presentation in	A. 4 ways B. 12 ways C. 256 ways D. 24 ways
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	C. $\ln f(x) + c$ D. $f(x) - c$
10	$(x^3 - 1/2x)^6$ is	A. $15/16 x^2$ B. $2/13 x^2$ C. $17/7 x^2$ D. $16/15 x^2$
11	For all points (x,y) in third quadrant	A. $x > 0, y < 0$ B. $x > 0, y > 0$ C. $x < 0, y < 0$ D. $x < 0, y > 0$
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
13	$\tan(2\pi + \theta) = \underline{\hspace{2cm}}$;	A. $\tan \theta$ B. $-\tan \theta$ C. $\cot \theta$ D. $-\cot \theta$
14	The point of contact of the circles $x^2 + y^2 - 6x - 6y + 10 = 0$ and $x^2 + y^2 = 2$ is	A. (-3, 2) B. (1, 3) C. (-2, -1) D. None of these
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
16	The angle of elevation of the top of a tree from a point 17 meters from its foot is 42° . The height of the tree is	A. 12m B. 21m C. 17m D. 15m
17	The process of finding a function whose derivative is given is called a	A. Differentiation B. Integration C. Differential

D. None

18 The quadratic equation $8 \sec^2\theta - 6 \sec\theta + 1 = 0$ has

- A. Infinitely many roots
- B. Exactly two roots
- C. Exactly four roots
- D. No roots

19 The system of measurement in which the angle is measured in radians is called the

- A. circular system
- B. CGS system
- C. sexagesimal system
- D. none of these

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