

Mathematics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	Which is in the solution set of $4x - 3y < 2$	A. (3, 0) B. (4, 1) C. (1, 3) D. None
2	Question Image <input style="width: 100%; height: 20px;" type="text"/>	A. A linear equation B. A cubic equation C. A quadratic equation D. An equation for circle
3	The direction cosines of y-axis are	A. 1,0,0 B. 0,1,0 C. 0,0,1 D. 1,1,1
4	A line segment whose end points lie on a circle is called	A. The secant of the circle B. The arc of the circle C. The chord of the circle D. The circumference of the circle
5	The perpendicular bisector of any chord of a circle	A. Passes through the centre of the circle B. Does not pass through the centre of the circle C. May or may not pass through the centre of the circle D. None of these
6	In general matrices do not satisfy	A. Commutative law w.r.t multiplication B. Associative law w.r.t addition C. Distributive law w.r.t addition D. Multiplication of a scalar with the matrix
7	The equation of the normal to the circle $x^2 + y^2 = 25$ at (4, 3) is	A. $3x - 4y = 0$ B. $3x - 4y = 5$ C. $4x + 3y = 5$ D. $4x + 3y = 25$
8	Question Image <input style="width: 100%; height: 20px;" type="text"/>	
9	The difference of two consecutive terms of an A.P. is called	A. Constant of series B. Common ratio C. Common difference D. General term
10	In a school, there are 150 students. Out of these 80 students enrolled for mathematics class, 50 enrolled for English class, and 60 enrolled for Physics class. The student enrolled for English cannot attend any other class, but the students of mathematics and Physics can take two courses at a time. Find the number of students who have taken both physics and mathematics	A. 40 B. 30 C. 50 D. 20
11	A function $F(x)$ is called even if	A. $F(x) = F(-x)$ B. $F(x) = F(-x)$ C. $F(x) = -F(x)$ D. $2F(x) = 0$
12	What is the period of $\cot x$?	
13	If n is a positive integer, then $3+6+9+ \dots +3n =$	
14	Question Image <input style="width: 100%; height: 20px;" type="text"/>	
15	Question Image <input style="width: 100%; height: 20px;" type="text"/>	A. $A \leq G \leq H$ B. $A \geq G \geq H$ C. $A \leq G \geq H$ D. $A \geq G \leq H$
16	Question Image <input style="width: 100%; height: 20px;" type="text"/>	D. None
17	The line joining (1, 3) to (a, b) has unit gradient then	A. $a-b = -2$ B. $a+b = 0$ C. $a-b = 5$

$$D. 2a+3b=1$$

18 If $x < y$, $2x = A$, and $2y = B$, then

- A. $A = B$
- B. $A < B$
- C. $A > x$
- D. $B > y$

19 Question Image

20 Question Image

- A. 1
- B. 2
- C. 3
- D. 4