

NAT II Physical Science Mathematics

Sr	Questions	Answers Choice
1	The common difference of the sequence 7,4,1, is	A. 1 B. -3 C. 5 D. 0
2	Question Image	
3	The magnitude of a vector can never be	A. Zero B. Negative C. Positive D. Absolute
4	If you are looking a high point from the ground, then the angle formed is	A. Angle of elevation B. Angle of depression C. Right angle D. Horizon
5	A farmer possesses 100 hectometers of land and wants to grow corn and wheat. Cultivation of corn requires 3 hours per hectometer while cultivation of wheat requires 2 hours per hectometer. Working hours cannot exceed 240. If he gets a profit of Rs. 20 per hectometer for corn and Rs. 20 per hectometer for wheat. The profit function for the farmer is	A. $P(x,y) = 20x + 15y$ B. $P(x,y) = 2x + 3y$ C. $P(x,y) = x + y$ D. $P(x,y) = 3x + 2y$
6	Question Image	D. None of these
7	If $x < y$, $2x = A$, and $2y = B$, then	A. $A = B$ B. $A < B$ C. $A < x$ D. $B < y$
8	The multiplicative inverse of x such that $x = 0$ is	A. $-x$ B. does not exist C. $1/x$ D. 0
9	Question Image	
10	If A and B are matrices such that $AB=BA=I$ then	A. A and B are multiplicative inverse of each other B. A and B are additive inverses of each other C. A and B are singular matrices D. A and B are equal
11	Question Image	
12	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
13	Question Image	A. $1/2$ B. $3/5$ C. $4/5$ D. 1
14	Question Image	
15	The set $\{a,b\}$ is	A. Infinite set B. Singleton set C. Two points set D. None
16	Question Image	
17	If $1 + \cos x = 0$, then $x =$	
18	If any two rows (or any two columns) of a square matrix are inter changed, the determinant of the resultant matrix is	A. Same as the original determinant B. Additive inverse of the original determinant C. Both A and B

D. Adj of the original matrix

19 The set of complex numbers forms a group under the binary operation of

- A. Addition
- B. Multiplication
- C. Division
- D. Subtraction

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- A. 15
 - B. 60
 - C. 90
 - D. 20
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