

NAT II Physical Science Mathematics

| Sr | Questions | Answers Choice |
|----|---|--|
| 1 | If n is a positive integer, then $3+6+9+ \dots +3n =$ | |
| 2 | Question Image | A. 10 B. 20 C. 40 D. 26 |
| 3 | Question Image | |
| 4 | The center of a circle of radius 10 is on the origin. Which of the following points lies with in the circle | A. (10, 0) B. (8, 8) C. (8, 4) D. (0, 10) |
| 5 | If P(E) is the probability that can event will occur, then $P(E) =$ | A. 1 B. 0.5 C. 2 D. 0 |
| 6 | Question Image | |
| 7 | The point (-5, 3) is the center of a circle and P(7, -2) lies on the circle. The radius of the circle is | A. 2 B. 13 C. 7 D. 8 |
| 8 | Question Image | |
| 9 | Question Image | |
| 10 | Question Image | D. None of these |
| 11 | Question Image | |
| 12 | Write the first four terms of the arithmetic sequence if $a_1 = 5$ and other three consecutive terms are 23,26,29 | A. 23, 26, 29, 32 B. 5, 8, 11, 14 C. 8, 11, 14, 17 D. None of these |
| 13 | Which of the following is the subset of all sets? | B. {1, 2,3} D. {0} |
| 14 | Question Image | A. A < G < H B. A > G > H C. A < G > H D. A > G < H |
| 15 | The nth term in G.P 3,-6,12,..... is | A. $3(-2)^{n-1}$ B. $2(-2)^{n+1}$ C. $3(-2)^n$ D. $4(-2)^{n-1}$ |
| 16 | $\sin(a + b) + \sin(a - b) =$ | A. $\sin a \cos b$ B. $\sin a \sin b$ C. $\sin a + \cos b$ D. $\sin a - 2 \cos b$ |
| 17 | If the sum of the roots of the equation $ax^2 - 2x + 2a = 0$ is equal to their product, then the value of a is | A. 1 B. 2 C. 3 D. 4 |
| 18 | A standard deck of 52 cards is shuffled. What is the probability of choosing the queen of the diamonds | A. 1/5 B. 1/13 C. 5/52 D. 1/52 |
| 19 | In 30,60,90 triangle, if the smallest side is 6 then the side opposite to the angle of 60° is | A. 12 B. 3 D. 6 |
| 20 | Question Image | D. None of these |

