# NAT II Physical Science Mathematics

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | If the angle of a triangle are in the ratio 2:3:7, the triangle is | A. Obtuse<br>B. Acute<br>C. Right angle<br>D. Isosceles |
| 2 | How many elements are in the sample space of two rolling dies | A. 6<br>B. 12<br>C. 18<br>D. 36 |
| 3 | The equation of the line with gradient 1 passing through the point (h, k) is | A. Y = x + k - h<br>B. Y = k/h x + 1<br>C. Y = x + h - k<br>D. Ky = hx - 1 |
| 4 | A line segment whose end points lie on a circle is called | A. The secant of the circle<br>B. The arc of the circle<br>C. The chord of the circle<br>D. The circumference of the circle |
| 5 | Question Image | |
| 6 | If a statement S(n) is true for n = 1 and the truth of S(n) for n + K implies the truth of S(n) for S(n) = K + 1, then S(n) true for all | A. All Real numbers<br>B. All integers<br>C. Positive integers<br>D. All complex numbers |
| 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<br>B. 13<br>C. 7<br>D. 8 |
| 8 | Question Image | |
| 9 | If the diagonal of a square has coordinates (1, 2) and (5,6) the length of a side is | A. 3<br>B. 4<br>C. 1<br>D. 5 |
| 10 | Question Image | |
| 11 | Question Image | A. (0, e)<br>B. (0, 1)<br>D. None |
| 12 | Which is in the solution set of 4x - 3y < 2 | A. (3, 0)<br>B. (4, 1)<br>C. (1, 3)<br>D. None |
| 13 | Question Image | |
| 14 | Question Image | |
| 15 | Question Image | |
| 16 | Question Image | |
| 17 | If 0 < n < 1, n is a rational number, the number of terms in the expansion of $(1 + X)^n$ are | A. n + 1<br>B. 2n<br>C. Infinitely many<br>D. 2n<sup>2</sup> |
| 18 | Question Image | A. 1<br>B. 2<br>C. 3<br>D. 4 |
| 19 | The value of the polynomial $3x^3 + 4x^2 - 5x + 4$ at x = -1 is | A. 12<br>B. 1<br>C. 10<br>D. -10 |

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|---|---|---|
| 20 | A standard deck of 52 cards is shuffled. What is the probability of choosing the queen of the diamonds | A. 1/5<br>B. 1/13<br>C. 5/52<br>D. 1/52 |