# NAT II Physical Science Mathematics

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | If $K_1$: $K_2$= 1 : 1 then the point P dividing the line is | A. Midpoint<br>B. Extreme left point<br>C. Extreme Right Point<br>D. P lies out side k<sub>1</sub>and k<sub>2</sub> |
| 2 | If you are looking a high point from the ground, then the angle formed is | A. Angle of elevation<br>B. Angle of depression<br>C. Right angle<br>D. Horizon |
| 3 | Question Image | D. -2-i |
| 4 | Two natural numbers whose sum is 25 and difference is 5, are | A. 25, 20<br>B. 20, 10<br>C. 20, 5<br>D. 15, 10 |
| 5 | Question Image | A. 0<br>B. 1<br>C. -1<br>D. 2 |
| 6 | 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<br>B. Additive inverse of the original determinant <br>C. Both A and B<br>D. Adj of the original matrix |
| 7 | Question Image | A. 1/2<br>B. 3/5<br>C. 4/5<br>D. 1 |
| 8 | 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 |
| 9 | The set of complex numbers forms a group under the binary operation of | A. Addition<br>B. Multiplication<br>C. Division<br>D. Subtraction |
| 10 | Sin(a + b) + Sin (a - b) = | A. Sin a Cos b<br>B. Sin a Sin b<br>C. Sin a + Cos b<br>D. Sin a - 2 Cos b |
| 11 | A fraction in which the degree of the numerator is less than the degree of the denominator is called | A. Polynomial<br>B. Proper fraction<br>C. Rational fraction<br>D. Mixed fraction |
| 12 | The complement of set A relative to universal set U is the set | D. A - U |
| 13 | 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 |
| 14 | Question Image | A. 0<br>B. -25<br>C. 5<br>D. 45 |
| 15 | The radius of the circle $(x-1)^2+ (y+3)^2= 64$ is | A. 8<br>C. 4<br>D. 64 |
| 16 | Question Image | |
| 17 | The constant distance of all points of the cirlce from its centre is called the | A. Radius of the circle<br>B. Secant of the circle |

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|---|---|---|
| 17 | The constant distance of all points of the circle from its centre is called the | C. Chord of the circle<br>D. Diameter of the circle |
| 18 | Question Image | |
| 19 | 120 degrees are equal to how many radians? | |
| 20 | If$\alpha$ and$\beta$ be irrational roots of a quadratic equation, then | |