## NAT II Physical Science Mathematics

| Sr | Questions | Answers Choice |
|----|-----------|----------------|
| 1 | Question Image | D. None |
| 2 | Question Image | A. 2 <br> B. 1 <br> C. 0 |
| 3 | Question Image | A. <div>Both A,B have the same number of columns</div> <br> B. <div>Both A and B do not have the same order</div> <br> C. <div>Number of col A is same as number of rows of B</div> <br> D. <div>Number of rows of A is same as number of col of B</div> |
| 4 | If $f_1(x)$ and $f_2(x)$ are any two anti derivatives of a function F (x), then the value of $f_1(x) - f_2(x)$ = | A. A variable <br> B. A constant <br> C. undefined <br> D. infinity |
| 5 | Question Image | |
| 6 | Question Image | A. A linear equation <br> B. A cubic equation <br> C. A quadratic equation <br> D. An equation for circle |
| 7 | 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 |
| 8 | If$\alpha$ and$\beta$ be irrational roots of a quadratic equation, then | |
| 9 | 6 is | A. A prime integer <br> B. An irrational number <br> C. A rational number <br> D. An odd integer |
| 10 | Question Image | |
| 11 | A relation in which the equality is true only for some values of the unknown variable is called | A. An identity <br> B. An equation <br> C. A polynomial <br> D. Inverse function |
| 12 | If P(E) is the probability that can event will occur, then P(E) = | A. 1 <br> B. 0.5 <br> C. 2 <br> D. 0 |
| 13 | The multiplicative inverse of x such that x = 0 is | A. -x <br> B. does not exist <br> C. 1/x <br> D. 0 |
| 14 | The magnitude of a vector can never be | A. Zero <br> B. Negative <br> C. Positive <br> D. Absolute |
| 15 | Cos 315°= | A. 0.707 <br> B. 0.5 <br> C. 1 <br> D. 0 |
| 16 | The set {{a,b}} is | A. Infinite set <br> B. Singleton set <br> C. Two points set <br> D. None |
| 17 | A die is thrown. What is the probability that there is a prime number on the top? | A. 1/2 <br> B. 1/3 <br> C. 1/6 |

| 18 | The set of complex numbers forms a group under the binary operation of | A. Addition<br>B. Multiplication<br>C. Division<br>D. Subtraction |
| --- | --- | --- |
| 19 | In the expansion of $(a + b)^n$ in every term the sum of the exponents of a and b is | A. n<br>B. n + 1<br>C. 2n - 1<br>D. 2n + 1 |
| 20 | Question Image | A. 10<br>B. 20<br>C. 40<br>D. 26 |