

**ST. LAWRENCE HIGH SCHOOL** A JESUIT CHRISTIAN MINORITY INSTITUTION



## WORKSHEET-27 <u>SUBJECT – MATHEMATICS</u> <u>Final - Term</u>

## Chapter: Algebra

## **Topic: Miscellaneous**

Class: XI

Date: 21.01.2021

## <u>Choose the correct option</u>

<u>(1 x 15=15)</u>

- 1. How many different permutations can be made by taking all the letters of the word BENGALI ?
  - a) 6!
  - b) 7!
  - c) 8!
  - d) 9!
- 2. How many different permutations can be made by taking all the letters of the word DRAUGHT so that the vowels are always together ?
  - a) 1450
  - b) 1340
  - c) 1440
  - d) 1404
- 3. How many different permutations can be made by taking all the letters of the word ACCOUNTANT ?
  - a) 262800
  - b) 226800
  - c) 216800
  - d) 228600
- 4. Find the rank of the letter LATE when its letter are arranged as in a dictionary.
  - a) 12
  - b) 14
  - **c)** 16
  - d) None of these.

- 5. **0**! = ?
  - a) 0
  - b) 1
  - c) Undefined
  - d) -1
- 6.  ${}^{n}P_{n} = ?$ 
  - a) 1
  - b) *n*
  - c) *n*!
  - d) 0!
- 7.  $^{100}C_{98} = ?$ 
  - a) 4590
  - **b)** 4950
  - **c)** 4090
  - d) 4050
- 8.  ${}^{57}C_{57} = ?$ 
  - a) 0!
  - **b)** 57
  - **c)** 57!
  - d) None of these.
- 9. If there are 12 persons in a party, and if each two of them shake hands with each

other , how many handshakes will happen in the party ?

- a) 132
- b) 66
- c) 24
- d) 12!
- 10. In how many ways 4 cards can be chosen from a pack of 52 playing cards , where

the chosen 4 cards will be face cards ?

a) 459 , b) 549 , c) 495 , d) 954

- 11. The number of terms in the expansion of  $\left(x \frac{2}{3x}\right)^{11}$  is ?
  - a) 11 , b) 12 , c) 13 , d) 14
- 12. The index of y in the 10<sup>th</sup> term of the expansion of  $(x + y)^{19}$  is ?
  - a) 9 , b) 10 , c) 19 , d) 20
- 13. The middle term in the expansion of  $(2x 3y)^{12}$  is ?
  - a) 7<sup>th</sup> term
  - b) 8<sup>th</sup> term
  - c) 8<sup>th</sup> term
  - d) None of these.
- 14. The middle term in the expansion of  $(3x 4y)^{15}$  is ?
  - a) 6<sup>th</sup> & 7<sup>th</sup> terms.
  - **b)** 5<sup>th</sup> & 6<sup>th</sup> terms.
  - c) 7<sup>th</sup> & 8<sup>th</sup> terms.
  - d) 8<sup>th</sup> & 9<sup>th</sup> terms.
- 15. If 7 is multiplied to each term of a GP, Then the resulting series is a
  - a) AP
  - b) GP
  - c) Arithmetico-Geometric series
  - d) None of these.

**Prepared by :-**

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