



ST. LAWRENCE HIGH SCHOOL
A JESUIT CHRISTIAN MINORITY INSTITUTION



SOLUTIONS OF WORKSHEET-27
SUBJECT – MATHEMATICS
Final - Term

Chapter: Algebra

Class: XI

Topic: Miscellaneous

Date: 21.01.2021

Choose the correct option **(1 x 15=15)**

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. ${}^nP_n = ?$

- 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 10th 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) 7th term
b) 8th term
c) 8th term
d) None of these.
14. The middle term in the expansion of $(3x - 4y)^{15}$ is ?
a) 6th & 7th terms.
b) 5th & 6th terms.
c) 7th & 8th terms.
d) 8th & 9th 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.

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