

ST. LAWRENCE HIGH SCHOOL A JESUIT CHRISTIAN MINORITY INSTITUTION



SOLUTIONS OF Worksheet-20

SUBJECT - MATHEMATICS

<u>2nd-term</u>

Chapter: Algebra

Topic: Permutations

Class: XI

Date: 07.11.2020

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. How many different permutations can be made by taking all the letters of the word STATISTICS ?
 - a) 50400
 - b) 40500
 - **c) 54004**
 - <u>d) None of these</u>

- 5. How many different permutations can be made by taking all the letters of the word SUCCESS ?
 - a) 240
 - b) 450
 - **c)** 400
 - d) None of these.
- 6. An unbiased coin is tossed 5 times in succession. How many different outcomes are possible ?
 - a) 30
 - **b)** 32
 - c) 25
 - d) None of these.
- 7. A six faced unbiased dice is rolled 4 times. How many different outcomes are possible?
 - a) 1396
 - b) 1169
 - c) 1296
 - d) 1369
- 8. How many different arrangements can be made by taking all the letters of the word ORION so that the consonants are never together ?
 - a) 35
 - **b)** 36
 - c) 37
 - d) 38
- 9. How many different arrangements can be made by taking all the letters of the word STRANGE so that the vowels may appear in the odd places ?
 - a) 1444
 - b) 1044
 - c) 1404
 - d) 1440
- 10. In how many ways can 4 boys and 3 girls be arranged in a row so that no two girls come together ?
 - a) 1040
 - b) 1440
 - **c)** 1443
 - d) 1445

- 11. In how many ways can 3 boys and 5 girls be arranged in a row so that all the 3 boys are together ?
 - a) 4230
 - b) 4210
 - c) 4230
 - d) 4320
- 12. How many different arrangements can be made by taking all the letters of the word LOGARITHM ?
 - a) 362800
 - b) 356880
 - c) 347880
 - d) None of these
- 13. How many different arrangements can be made by taking all the letters of the word LOGARITHM which begin with L ?
 - a) 40320
 - b) 43210
 - c) 40330
 - d) 40310
- 14. How many different arrangements can be made by taking all the letters of the word LOGARITHM which begin with L and do not end with M ?
 - a) 35288
 - b) 35289
 - c) 35280
 - d) 35270
- 15. If none of the digits 3, 5, 7, 8, 9 be repeated, how many different numbers greater than 7000 can be formed with them ?
 - a) 190
 - b) 191
 - c) 192
 - d) 196

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