ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

FOR GOD AND COUNTRY

Worksheet-20

SUBJECT – MATHEMATICS

2nd-term

Chapter: Algebra **Class: XI**

Topic: Permutations **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
   d) None of these.

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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