

# SRM UNIVERSITY

Career Guidance Cell

## WORK SHEET II

### (PERMUTATION & COMBINATION, PROBABILITY, DATA SUFFICIENCY)

1. How many different numbers greater than three lakhs can be formed out of the digits 111223?  
(A) 60 (B) 10 (C) 120 (D) 720
2. How many words can be formed with the letters of the word "PATALIPUTRA" without changing the relative order of the vowels and consonants?  
(A) 3600 (B) 3900 (C) 6300 (D) 4600
3. In how many ways 4 boys and 4 girls can be seated in a row so that boys and girls are alternate?  
(A) 576 (B) 5040 (C) 40320 (D) 1152
4. Find the number of numbers between 300 and 3000 that can be formed with the digits 0,1,2,3,4 and 5, no digits being repeated in any number  
(A) 90 (B) 120 (C) 160 (D) 180
5. There are 12 points in a plane out of which 5 are collinear. Find the number of triangles formed by the points as vertices  
(A) 185 (B) 210 (C) 220 (D) 175
6. There are seven questions in a question paper. In how many ways can a student solve one or more questions?  
(A) 128 (B) 63 (C) 127 (D) 129
7. Five Matches are to be played in a chess tournament. In how many ways can their results be decided?  
(A) 243 (B) 343 (C) 128 (D) none of these
8. On a New Year day every student of a class sends a card to every other student. The postman delivers 552 cards. How many students are there in the class?  
(A) 22 (B) 23 (C) 24 (D) 33
9. Find the sum of all numbers that can be formed with the digits 2,3,4,5 taken all at a time?  
(A) 92234 (B) 92334 (C) 93324 (D) 92 334
10. In how many ways the letters of the word PARALLEL be arranged so that all the L's do not come together?  
(A) 2000 (B) 2100 (C) 3220 (D) 3000
11. How many different signals can be made by hosting 6 differently coloured flags one above the other, when any number of them may be hoisted at one time?  
(A) 6! (B)  $6(6P_6)$  (C) 1956 (D) 1440
12. If the letters of the word CHASM are rearranged to form 5 letter words such that none of the word repeat and the results arranged in ascending order as in a dictionary what is the rank of the word CHASM?  
(A) 24 (B) 31 (C) 32 (D) 30

13. Find the number of diagonals in a regular hexagon

14.