

CLASS XI ,MATHS

CHAPTER: 7 .PERMUTATIONS AND COMBINATIONS

WORKSHEET OF MODULE-1/3

VERY SHORT ANSWER TYPE QUESTIONS

Each question is of 1 mark weightage

- 1.How many two digit even numbers can be formed from the digits 1,2,3,4,5 if the digits can be Repeated?
- 2.Find the number of two digit numbers whose sum is odd.
- 3.Find the number of outcomes which can be formed ,when it is tossed three times?
- 4.If a boy goes to a stationary store and wants to buy either 3 pencils or 4 erasers, find the number of possibilities
- 5.A boy has 2 pairs of white shoes and 5 pairs of black shoes.Find the number of ways of wearing either 2 pairs of white shoes or 5 pairs of black shoes .
- 6.Let there be 5 people (including yourself) outside the café who form a queue .
In how many ways can this queue be formed?
- 7.How many three digit numbers can be formed from the digits 1,2,3,4,5,6 if the digits can be repeated?
8. Find the number of six-digit numbers all digits of which are odd ?

SHORT ANSWER TYPE QUESTIONS

Each question is of 2 mark weightage

- 9.Find the number of 5-digit telephone numbers that can be constructed using the digits 0 to 9 if each number starts with 67 and no digit appears more than once?
- 10.In a college canteen ,5 varieties of sweet,12 varieties of cold drinks and 3 varieties of ice-creams are available .Find number of ways a student can have one sweet or one coldrink ?

LONG ANSWER TYPE QUESTIONS

Each question is of 4 marks

11. A suit case has a number lock with 3 wheels each labelled with 10 rings and the digits varies from 0 to 9. The lock can be opened if 3 specific digits are arranged in a particular sequence .

Find the number of attempts that can be made ,if

- (a) Repetition of digits is allowed.
- (b) Repetition of digits is not allowed.

12. Using the digits 1,2,3,4,5,6,7 a number of 4 different digits is formed, find

- (i) how many numbers are formed?
- (ii) how many numbers are exactly divisible by 2?
- (iii) how many numbers are exactly divisible by 25?
- (iv) how many of these are exactly divisible by 4?

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