

Quiz 5

- (1) How many different permutations are there for the word CINCINNATI?
- (2) How many different permutations are there for the word CINCINNATI if no two N's are consecutive?
- (3) 50 people are standing in a line. In how many ways, can they change their positions so that exactly 30 of them keep their original positions?
- (4) How large a group should be to ensure at least 10 people in the group were born in the same month?
- (5) How many 6-digit decimal numbers are there if repetition is not allowed?
- (6) How many odd 6-digit decimal numbers are there if repetition is not allowed?
- (7) In how many ways can you put 5 distinct red balls and 7 identical blue balls in 40 distinct boxes if the box can contain at most one ball?
- (8) In how many ways can 12 CS books and 25 Math books be ordered on a shelf if the CS books are to be together?
- (9) If 50 students are taking CSIT 241, 70 students are taking CSIT 221, and 17 students are taking both CSIT 241 and CSIT 221. How many students are taking CSIT 241 but not CSIT 221?
- (10) A committee consists of 7 women and 10 men has to be chosen from a group of 40 women and 50 men. How many different committees can be chosen?