1.A Bag contains 5 black and 6 red balls,determine the number of ways in which 2 black and 3 red balls can be selected from the lot.

2. In how many ways a committee consisting of 3 men and 2 women can be chosen from 7 men and 5 women?

3. Find the total number of words which can be formed by taking 2 vowels and 3 consonants from 4 vowels and 5 consonants ?

4. Find the number of diagonals that can be drawn from a regular Hexagon?

5.If $n_{c_{14}} = n_{c_6}$,then find n?

6. If $20_{c_r} + 20_{c_{18}} = 21_{c_{18}}$ then find r?

7.A polygon has 65 diagonals .Find the number of the sides of polygon?

8.If $n_{p_r} = 720 n_{c_r}$, then what is r?

9.If $8_{p_r} = 1680$ and $8_{c_r} = 70$, then what is r?

10.How many chords can be drawn from 15 points on a circle?

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SHORT ANSWER TYPE QUESTIONS

Each question is of 2 marks

9. Everybody in a room shakes hands with every body else.If the total number of hand shakes is 66,then find the total number of persons in the room ?

10.Find the number of triangles that are formed by choosing the vertices from a set of 12 points, seven of which lie on the same line ?

11.Find the number of parallelograms that can be formed from a set of six parallel Lines intersecting another set of three parallel lines ?

12.If $n+2_{c_8} : n-2_{p_4} = 57:16$,find n

13 . Find the number of arrangements of letters of the word 'BANANA' in which two N's do not appear adjacently ?

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