PERMUTATIONS AND COMBINATIONS

COMBINATION

EXERCISE

Q1. The expression's value is given by: ${}^{50}C_4 + \sum_{r=1}^{6} {}^{56-r}C_3$ is.

(a) ${}^{56}C_4$ (b) ${}^{56}C_3$ (c) ${}^{55}C_3$ (d) ${}^{55}C_4$

Q2. If ${}^{n}C_{r-1} = 36$, ${}^{n}C_r = 84$ and ${}^{n}C_{r+1} = 126$, then

(a) $n = 8, r = 4$ (b) $n = 9, r = 3$

(c) $n = 7, r = 5$ (d) None of these

Q3. If ${}^{n}C_r$, denotes the number of combinations of n things takes r at a time, then the expression ${}^{n}C_{r+1} + {}^{n}C_{r-1} + 2 \times {}^{n}C_r$ equals

(a) ${}^{n+2}C_r$ (b) ${}^{n+2}C_{r+1}$ (c) ${}^{n+1}C_r$ (d) ${}^{n+1}C_{r+1}$

Q4. If ${}^{189}C_{35} + {}^{189}C_x = {}^{190}C_x$, then x is equal to

(a) 34 (b) 35 (c) 36 (d) 37

Q5. The value of ${}^{47}C_4 + \sum_{r=1}^{5} {}^{52-r}C_3$ is equal to

(a) ${}^{47}C_6$ (b) ${}^{52}C_5$ (c) ${}^{52}C_4$ (d) None of these

Q.6 ${}^{n}P_r = 3024$ and ${}^{n}C_r = 126$, then r is

(a) 5 (b) 4 (c) 3 (d) 2

Q7. If ${}^{n-1}C_3 + {}^{n-1}C_4 > {}^{n}C_3$, then

(a) $n \geq 4$ (b) $n > 5$ (c) $n > 7$ (d) None of these

ANSWER

1. (a)

2. (b)

3. (b)

4. (c)

5. (C)

6. (b)

7. (c)