

**BINOMIAL THEOREM****INTRODUCTION OF BINOMIAL THEOREM****EXERCISE**

**Q.1** A child has 2 pencil and 3 erasers. In how many ways he can take a pencil and an eraser?

- (a) 5 (b) 6  
(c) 8 (d) 9

**Q.2** A father with 8 children takes them 3 at a time to the zoological gardens, as often as he can without taking the same 3 children together more than once. The number of times he will go the garden, is

- (a) 336 (b) 112  
(c) 56 (d) None of these

**Q.3** Find the number of 4 letter words which can be formed from word PULSE if repetition is allowed.

- (a) 120 (b) 125  
(c) 625 (d) 3125

**Q.4** Find the number of 4 letter words which can be formed from word PULSE without repetition.

- (a) 20 (b) 60  
(c) 120 (d) 240

**Q.5** Find the number of 5 letter words which can be formed from word PULSE if repetition is allowed.

- (a) 25 (b) 120  
(c) 125 (d) 3125

- Q.6** Find the number of 5 letter words which can be formed from word PULSE without repetition.
- (a) 20 (b) 60  
(c) 120 (d) 240
- Q.7** How many 5 – digit numbers are possible without repetition of digits?
- (a) 27216 (b) 50400  
(c) 100000 (d) 90000
- Q.8** If an event can occur in ‘m’ different ways, following which another event can occur in ‘n’ different ways, then the total numbers of occurrence of the events in the given order is \_\_\_\_\_
- (a)  $m+n$  (b)  $m-n$   
(c)  $mn$  (d)  $\frac{m}{n}$
- Q.9** If there are 4 paths to travel from Delhi to Kanpur, then in how many ways a person can travel from Delhi to Kanpur and came back to Delhi via different path?
- (a) 4 (b) 8  
(c) 12 (d) 16
- Q.10** If there are 4 paths to travel from Delhi to Kanpur, then in how many ways a person can travel from Delhi to Kanpur and came back to Delhi via same path?
- (a) 4 (b) 8  
(c) 12 (d) 16
- Q.11** If there are 4 paths to travel from Delhi to Kanpur, then in how many ways a person can travel from Delhi to Kanpur and came back to Delhi?
- (a) 4 (b) 8  
(c) 12 (d) 16

## ANSWER KEY

1. (b) 6
2. (c) 56
3. (c) 625
4. (c) 120
5. (d) 3125
6. (c) 120
7. (a) 27216
8. (c) mn
9. (c) 12
10. (a) 4
11. (d) 16