

CHAPTER-2 | Power Play

QUIZ
PART-07

1. Estu has 4 dresses and 3 caps. How many combinations are possible?

A. 7
B. 10
C. 12
D. 15 (C)

Explanation : Total combinations = $4 \times 3 = 12$.

2. Roxie has 7 dresses, 2 hats, and 3 pairs of shoes. How many ways can Roxie dress up?

A. 12
B. 21
C. 42
D. 49 (C)

Explanation: Total ways = $7 \times 2 \times 3 = 42$.

3. A 2-digit lock using digits 0–9 can have how many passwords?

A. 20
B. 90
C. 100
D. 200 (C)

Explanation: Each place has 10 choices, so $10 \times 10 = 100$.

4. A 5-digit password using digits 0–9 can have how many passwords?

A. 1,000
B. 10,000
C. 100,000
D. 1,000,000 (C)

Explanation: There are 10 choices for each of 5 slots, so $10^5 = 100,000$.

5. A lock has 6 slots with letters A to Z. How many passwords are possible?

A. 26^5
B. 26^6
C. 6^{26}
D. $26 + 6$ (B)

Explanation : Each of the 6 slots has 26 choices.

6. Indian PIN codes shown in the chapter have how many digits?

A. 4
B. 5
C. 6
D. 7 (C)

Explanation : Examples 464001 and 796017 both have 6 digits.

7. Which idea is mainly used to find total combinations?

A. Addition
B. Subtraction
C. Multiplication
D. Division (C)

Explanation : Choices are multiplied to get total combinations.

8. How many 3-digit numbers can be made without repetition from 1, 2, 3, 4, 5?

A. 50
B. 60
C. 70
D. 80 (B)

Explanation : Choices = $5 \times 4 \times 3 = 60$.

9. If there are 5 shirts and 4 caps, how many outfits are possible?

A. 9
B. 16
C. 20
D. 25 (C)

Explanation : Total outfits = $5 \times 4 = 20$.

10. In combinations, if choices are made step by step, we:

A. Add all choices
B. Multiply all choices
C. Subtract all choices
D. Divide all choices (B)

Explanation : The total number of possible arrangements is found by multiplying choices at each step.