

## CHAPTER-3 | Number Play

### QUIZ PART-08

1. Using the digits 4, 7, 3, 2, what is the smallest 4-digit number?

- A. 2347
- B. 2437
- C. 7234
- D. 7432 (A)

*Explanation:* Arrange the digits in ascending order: 2, 3, 4, 7 → 2347.

2. Using the digits 4, 7, 3, 2, what is the largest 4-digit number?

- A. 2347
- B. 7423
- C. 7432
- D. 7324 (C)

*Explanation:* Arrange the digits in descending order: 7, 4, 3, 2 → 7432.

3. What is the difference between 7432 and 2347?

- A. 5085
- B. 5095
- C. 5075
- D. 5175 (A)

*Explanation:*  $7432 - 2347 = 5085$ .

4. What is the sum of 7432 and 2347?

- A. 9769
- B. 9779
- C. 9789
- D. 9799 (B)

*Explanation:*  $7432 + 2347 = 9779$ .

5. What is the smallest 5-digit palindrome?

- A. 10001
- B. 10101
- C. 11111
- D. 99999 (A)

*Explanation:* A 5-digit palindrome reads the same both ways. The smallest one is 10001.

6. What is the largest 5-digit palindrome?

- A. 99999
- B. 99899
- C. 98989
- D. 99099 (A)

*Explanation:* The largest 5-digit palindrome is 99999.

7. What is the sum of the smallest and largest 5-digit palindromes?

- A. 109999
- B. 110000
- C. 100000
- D. 99998 (B)

*Explanation:*  $10001 + 99999 = 110000$ .

8. What is the difference between the largest and smallest 5-digit palindromes?

- A. 89998
- B. 89999
- C. 90098
- D. 98998 (A)

*Explanation:*  $99999 - 10001 = 89998$ .

9. If the time is 10:01, what is the next palindromic time on a 12-hour clock?

- A. 10:10
- B. 11:11
- C. 12:21
- D. 01:10 (B)

*Explanation:* A palindromic time reads the same pattern forward and backward. After 10:01, the next one is 11:11.

10. In Kaprekar's routine, which number is called the Kaprekar constant for 4-digit numbers?

- A. 495
- B. 5085
- C. 6174
- D. 9779 (C)

*Explanation:* The chapter's earlier part says that repeated steps lead to 6174, called the Kaprekar constant.