

## CHAPTER-1 | Patterns in Mathematics

QUIZ  
PART-04

1. The sequence 1, 1, 1, 1, 1 represents:

- A. Counting numbers
- B. All 1's
- C. Odd numbers
- D. Even numbers (B)

**Explanation:** This sequence is a repetition of 1, which is called the "All 1's" sequence.

2. The sequence 1, 2, 3, 4, 5 is an example of:

- A. Powers of 2
- B. Counting numbers
- C. Triangular numbers
- D. Fibonacci sequence (B)

**Explanation:** The sequence 1, 2, 3, 4, 5 is a basic example of counting numbers.

3. The sequence 1, 3, 5, 7, 9 is an example of:

- A. Even numbers
- B. Odd numbers
- C. Square numbers
- D. Triangular numbers (B)

**Explanation:** This sequence represents odd numbers, where each number is an odd number starting from 1.

4. The sequence 1, 2, 4, 6, 8 is an example of:

- A. Odd numbers
- B. Even numbers
- C. Counting numbers
- D. Powers of 2 (B)

**Explanation:** The sequence 1, 2, 4, 6, 8 represents even numbers, starting from 2 and increasing by 2.

5. The sequence 1, 3, 6, 10, 15 is known as:

- A. Triangular numbers
- B. Square numbers
- C. Powers of 3
- D. Fibonacci sequence (A)

**Explanation:** This sequence is called triangular numbers, where each number is the sum of the first few natural numbers.

6. The sequence 1, 4, 9, 16, 25 is an example of:

- A. Powers of 3
- B. Cube numbers
- C. Square numbers
- D. Triangular numbers (C)

**Explanation:** This sequence represents square numbers, where each number is the square of a natural number.

7. Which of these is the first number in the cube number sequence?

- A. 1
- B. 8
- C. 27
- D. 64 (A)

**Explanation:** The first number in the cube number sequence is 1 ( $1^3$ ).

8. The sequence 1, 8, 27, 64, 125 is an example of:

- A. Triangular numbers
- B. Cube numbers
- C. Square numbers
- D. Fibonacci sequence (B)

**Explanation:** This is the sequence of cube numbers, where each number is the cube of a natural number.

6. The sequence 1, 2, 3, 5, 8, 13 is called:

- A. Powers of 2
- B. Fibonacci sequence
- C. Even numbers
- D. Triangular numbers (B)

**Explanation:** This sequence is known as the Fibonacci sequence, where each number is the sum of the two preceding ones.

10. What is the pattern in the sequence 1, 2, 4, 8, 16?

- A. Powers of 2
- B. Powers of 3
- C. Square numbers
- D. Triangular numbers (A)

**Explanation:** This sequence is a series of powers of 2, where each number is double the previous one.