

► None of these

Question No: 26 (Marks: 1) - Please choose one

If r is a positive integer then $\gcd(r, 0) =$

- **r**
- 0
- 1
- None of these

Question No: 27 (Marks: 1) - Please choose one

Combinatorics is the mathematics of counting and arranging objects

- **True (Page 209)**
- False
- Cannot be determined

Question No: 28 (Marks: 1) - Please choose one

A circuit that consist of a single vertex is called

- **Trivial (Page 322)**
- Tree
- Empty

Question No: 29 (Marks: 1) - Please choose one

In the planar graph, the graph crossing number is

- **0 (Page 314)**
- 1
- 2
- 3

Question No: 30 (Marks: 1) - Please choose one

How many ways are there to select five players from a 10 member tennis team to make a trip to a match to another school?

- **$C(10, 5)$**
- $C(5, 10)$
- $P(10, 5)$
- None of these

Solution: The answer is given by the number of 5-combinations of a set with ten elements.
By Theorem 2, the number of such combinations is

$$C(10, 5) = \frac{10!}{5! 5!} = 252.$$

Question No: 31 (Marks: 1) - Please choose one

The value of $0!$ Is

- 0
- **1**