

$$\frac{(n+1)!}{(n-1)!}$$

The value of _____ is

- 0
- $n(n-1)$
- $n^2 + n$
- Cannot be determined

$$\frac{(n+1)!}{(n-1)!} = \frac{(n+1).n.\cancel{(n-1)!}}{\cancel{(n-1)!}} = (n+1).n = n^2 + n$$

Question No: 24 (Marks: 1) - Please choose one
Any two spanning trees for a graph

- Does not contain same number of edges
- Have the same degree of corresponding edges
- **contain same number of edges (Page 329)**
- May or may not contain same number of edges

Question No: 25 (Marks: 1) - Please choose one
When 3^k is even, then $3^k + 3^k + 3^k$ is an odd.

- True
- **False**

Question No: 26 (Marks: 1) - Please choose one
Quotient–Remainder Theorem states that for any positive integer d, there exist unique integer q and r such that $n = d.q + r$ and _____.

- **$0 \leq r < d$ (Page 201)**
- $0 < r < d$
- $0 \leq d < r$
- None of these

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

The value of $\lceil x \rceil$ for $x = -3.01$ is

- -3.01
- **-3**
- -2
- -1.99

$$\lfloor -3.01 \rfloor = \lfloor -4 + 0.99 \rfloor = -4$$

$$\lceil -3.01 \rceil = \lceil -4 + 0.99 \rceil = -4 + 1 = -3$$