Question No: 29 (Marks: 1) - Please choose one
An integer n is prime if and only if n > 1 and for all positive integers r and s, if n = r·s, then

- r = 1 or s = 2.
- r = 1 or s = 0.
- r = 2 or s = 3.
- **None of these (Page 187)**

Question No: 30 (Marks: 1) - Please choose one
If $P(A \cap B) = P(A)P(B)$ then the events A and B are called

- **Independent (Page 272)**
- Dependent
- Exhaustive

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If A and B are two disjoint (mutually exclusive) events then, P(A∪B) =

- P(A) + P(B) + P(A∩B)
- P(A) + P(B) + P(AUB)
- P(A) + P(B) - P(A∩B)
- P(A) + P(B) - P(A∩B)
- **P(A) + P(B) (Page 240)**

If p=It is red,
q=It is hot
Then, It is not red but hot is denoted by $\sim p \wedge \sim q$

- True
- **False**

If ($A \cup B$) = A, then ($A \cap B$) = B

- **True**
- False
- Cannot be determined

How many integers from 1 through 1000 are neither multiple of 3 nor multiple of 5?

- 333
- 467
- **533 (Page 245)**