# **Mathematical Reasoning - Class XI**

# **Past Year JEE Questions**

#### Questions

# Quetion: 01

Negation of the statement :

- $\sqrt{5}$  is an integer or 5 is irrational is :
- A.  $\sqrt{5}$  is not an integer and 5 is not irrational.
- B.  $\sqrt{5}$  is irrational or 5 is an integer.
- C.  $\sqrt{5}$  is an integer and 5 is irrational.
- D.  $\sqrt{5}$  is not an integer or 5 is not irrational.

#### **Solutions**

#### **Solution: 01**

# **Explanation**

 $p = \sqrt{5}$  is an integer.

q:5 is irrational

$$\sim (p \lor q) \equiv \sim p \land \sim q$$

=  $\sqrt{5}$  is not an integer and 5 is not irrational.