

## Mathematical Reasoning - Class XI

### Past Year JEE Questions

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#### Questions

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##### Question: 01

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Consider the statement "The match will be played only if the weather is good and ground is not wet". Select the correct negation from the following :

- A. The match will not be played and weather is not good and ground is wet.
- B. If the match will not be played, then either weather is not good or ground is wet.
- C. The match will be played and weather is not good or ground is wet.
- D. The match will not be played or weather is good and ground is not wet.

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#### Solutions

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##### Solution: 01

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##### Explanation

$p$  : weather is good

$q$  : ground is not wet

$$\sim (p \wedge q) \equiv \sim p \vee \sim q$$

$\equiv$  weather is not good or ground is wet