

Easy Deputy Executive Engineer (Electrician) 2026 Gujarat Public Service Commission / Assistant Engineer (Electrical) 2026

: 1.

- A

1 2
- B

2 3

Correct
- C

1 3
- D

1, 2 3

Correct Answer: B

Full Detailed Explanation

: B - 2 3

Let A and B be two events such that $P(A) = \frac{1}{2}$ and $P(B) = \frac{1}{3}$. If $P(A \cap B) = \frac{1}{6}$, then $P(A \cup B)$ is equal to:
A) $\frac{1}{2}$ B) $\frac{1}{3}$ C) $\frac{1}{6}$ D) $\frac{1}{12}$
Solution: We know that $P(A \cup B) = P(A) + P(B) - P(A \cap B)$. Substituting the given values, we get $P(A \cup B) = \frac{1}{2} + \frac{1}{3} - \frac{1}{6} = \frac{2}{3}$. Therefore, the correct answer is B.