



SoulShift - Educational Q&A Platform

General Questions

Practice Questions



Q1. What is the total current in a parallel circuit with two branches, one with 5A and the other with 3A? (2022)

- A. 8A
- B. 15A
- C. 2.5A
- D. 5A

Solution: Total current in parallel = $I_1 + I_2 = 5A + 3A = 8A$.

Q2. What is the total current in a series circuit with a 10Ω resistor and a 20Ω inductor connected to a 100V AC source at 50Hz? (2023)

- A. 2A
- B. 4A
- C. 5A
- D. 10A

Solution: Total impedance $Z = \sqrt{R^2 + (\omega L)^2} = \sqrt{10^2 + (2\pi(50)(20))^2}$. Calculate to find current.



