



# **SoulShift - Educational Q&A Platform**

## **General Questions**

Practice Questions



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**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  $10\Omega$  resistor and a  $20\Omega$  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.*



