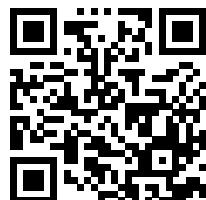




## **SoulShift - Educational Q&A Platform**

### **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  $10\Omega$  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.*



