

Worksheet: Alternating Current

IB · Class 12 · Physics · 5 questions · 12 marks

Name: _____

Date: _____

Score: _____ / 12

Q1. A 220 V AC supply has what peak voltage? *[2 marks]*

Q2. A step-down transformer converts 220 V to 11 V with 1000 primary turns. Find the secondary turns. *[2 marks]*

Q3. An LCR circuit has $R = 20$, $X_L = 30$, $X_C = 10$ ohm. Find impedance and phase angle. *[3 marks]*

Q4. A 0.1 H inductor and 50 μF capacitor are in series. Find the resonant frequency. *[3 marks]*

Q5. In an LCR circuit $V = 200$ V, $I = 5$ A, power consumed = 800 W. Find the power factor. *[2 marks]*
