NTS Educators SSE (Science) Jobs Test

Sr	Questions	Answers Choice
1	The peak voltage in a 200 volt A.C supply is nearly	A. 220 B. 253 C. 311
2	An ideal choke (used along with fluorescent tube) would be	A. A pure resistor B. A pure capacitor C. A pure inductor D. A combination of an inductor and a capacitor
3	A capacitor acts as an infinite resistance for	A. AC B. DC C. Both AC and DC
4	A 220 V, 50 Hz, AC source is connected to an inductance of 0.2.H and a resistance of 20 ohm in series What is the current in the circuit?	A. 10 A B. 5 A C. 33.3 A D. 3.33 A
5	In an AC circuit a resistance of R ohm i connected in series with an inductance L if phase angle between voltage and current be 45^{o} the value of inductive reactance will be	A. R/4 B. R/2 C. R
6	In LCR series AC circuit the phase angle between current and voltage is	A. Any angle between 0 and ±π/2 B. π/2 C. π D. Any angle between 0 and π/2
7	A particle moving in a magnetic field has increase in its velocity then its radius of the circle	A. Decreases B. Increases C. Remains the same D. Becomes half
8	A particle is moving in a uniform magnetic field then	A. Its momentum changes but total energy remains the same B. Both momentum and total energy remains the same C. Both changes D. Total energy change but momentum remains
9	The direction of induced current is such that it opposes the very cause that has produced it This is the law of	A. Lenz B. Faraday C. Kirchoff D. Fleming
10	Quantity that remains unchanged in a transformer is	A. Voltage B. Current C. Frequency D. None of these
11	In an L-R circuit time constant is that time in which current grows from zero to the value	A. 0.63 I_o B. 0.50 I_o C. 0.73 I_o D. I _o
12	The average power dissipation in a pure capacitor in AC circuit is	A. 1/2 CV² B. CV² C. 2CV² D. Zero
13	Which quantity is increased in step-down transformer?	A. Current B. Voltage C. Power D. Frequency
14	The primary winding of transformer has 500 turns whereas its secondary has 5000 turns The primary is connected to an a.c supply of 20 V, 50 Hz The secondary will have an output	A. 200 V, 50 Hz B. 2 V, 50 Hz

	of	C. 200 V, 500 Hz
15	In an ac circuit with voltage V and current 1 the power dissipated is	A. VI B. 1/2 VI C. 1/√2 VI D. Depends on the phase between V and 1