

PHYSICS

Std. X

Marks--20

Answer the following questions. (Qn1to 5 carries one score each)

- 10 resistors of 5ohms each are connected in parallel. calculate the effective resistance
- Which material is used to make heating coil in heating appliances?
- what is the unit of electric power?
- which of the following should be connected parallel to a device in a circuit?
(voltmeter ammeter galvanometer)
- If 120 coloumb charge is flowing through a circuit in 2 minutes, what will be the current in the circuit?
- which material is used as filament in filament bulb ? what are the properties to make it suitable for being used what are the properties to make it suitable for being used as a filamentas? (5)
- Match the following**

Device	Energy change	Effect of electricity
1. Electric bulb	a	lighting effect
2. electric heater	b	c
3. mixer grinder	electrical energy to mechanical energy	d
4. battery(while charging)	e	f

(6))

- 0.2A current flows through a resistor of resistance 100 ohm for 2 minute.
 - Calculate the heat generated in the circuit.
 - what will be the heat if the resistance is changed to 200ohm, being current and time remains the same. (4)