

ONE TWO ACADEMY**STD 10 SCIENCE****Electricity****Total:- 25 marks****Time:- 45 minutes****Answer the following questions:****4 x 1 = 4**

1. One horsepower = _____ watt.
2. What is SI unit of potential difference?
3. Expand LED.
4. Electric current passes from _____ terminal to _____ terminal.

Answer any three of the following questions:-**3 x 2 = 6**

5. Why is tungsten metal used in bulbs, but not in fuse wires?
6. Define electric potential and potential difference.
7. Distinguish between the resistivity and conductivity of a conductor.
8. How many electrons are passing per second in a circuit in which there is a current of 5A ?

Answer any two of the following questions:-**2 x 4 = 8**

10. a) State Ohm's law.
b) Calculate the resistance of a conductor through which a current of 2 A passes when the potential difference between its ends is 30 V.
11. a) Define electric current.
b) A charge of 12 coulomb flows through a bulb in 5 seconds. What is the current through the bulb?
12. a) State Joule's law of heating
b) An electric heater of resistance 5 ohms is connected to an electric source. If a current of 6 A flows through the heater, then find the amount of heat produced in 5 minutes.

Answer any one of the following questions:-**1 x 7 = 7**

13. a) What are the advantages of LED TV over the normal TV?
b) List the merits of LED bulb.
14. Explain about domestic electric circuits.