

## Chapter 8: Electricity

### Worksheet 1

#### 1. Write T for true and F for false statement.

- (i) Object can be charged when charges are static and not in motion.
- (ii) The rate of flow of electric charge in an electric circuit is called electric current.
- (iii) 1 kilowatt is equal to 1000 watts.
- (iv) The SI unit of potential difference is volt.
- (v) Electric power is equal to product of electrical energy consumed and time.

#### 2. Fill in the blanks.

- (i) The SI unit of electric current is \_\_\_\_\_.
- (ii) 1 \_\_\_\_\_ is also called 1 unit of electricity.
- (iii) \_\_\_\_\_ is the sure test of electrification.
- (iv) Like charges \_\_\_\_\_ each other.
- (v) When two bodies are charged by rubbing, \_\_\_\_\_ and \_\_\_\_\_ charges develop on them.

#### 3. Define the following.

- (i) Electrostatics
- (ii) Potential difference
- (iii) Electric power
- (iv) Fuse
- (v) Switch

#### 4. Answer these questions.

- (i) What is meant by resistance?
- (ii) What is the SI unit of electrical energy?
- (iii) What is called an alternative arrangement for fuse?
- (iv) What does electric meter measure?
- (v) If the power rating of an CFL is 22 W when operated at 220 V, find the maximum value of safe current flowing through it.

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## Worksheet 2

### 1. Write T for true and F for false statement.

- (i) Live wire is maintained at 0 V.
- (ii) Positive charge flows from lower potential to higher potential.
- (iii) Aluminium is a good conductor of electricity.
- (iv) Live wire is also known as phase wire.
- (v) Electric bulb is an example resistor.

### 2. Fill in the blanks.

- (i) An uncharged conductor can be charged by \_\_\_\_\_.
- (ii) A switch is always connected along with \_\_\_\_\_ wire.
- (iii) Higher the current rating of the circuit, \_\_\_\_\_ the fuse wire is.
- (iv) The \_\_\_\_\_ wire provides the return path of electric current from our house to mains supply.
- (v) A safety device used in an electric circuit that avoids the risk of a heavy shock to the user is called \_\_\_\_\_.

### 3. Match the columns.

#### Column A

- (i) Live wire
- (ii) Neutral wire
- (iii) Earth wire
- (iv) SI unit of electric power
- (v) SI unit of resistance

#### Column B

- (a) Green
- (b) ohm
- (c) watt
- (d) Red
- (e) Black

### 4. Answer these questions.

- (i) How is fuse wire made up of?
- (ii) Which is also known as kilowatt-hour meter?
- (iii) Calculate the value of 1 W h in joule.
- (iv) What is power rating of an electrical appliance?
- (v) What happens when glass rod is rubbed with silk fibre?