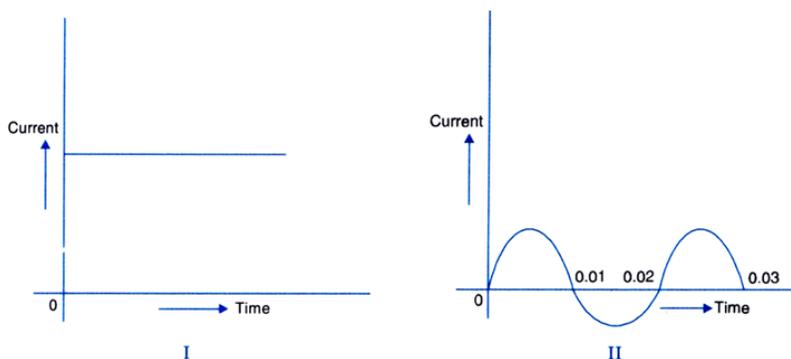


Board – CBSE

Class – 10th

Topic – Magnetic effect of electric current

1. State two properties of magnetic lines of force?
2. State the factors on which strength of magnetic field at a point due to a current carrying conductor depends?
3. What is the function of an earth wire? Why is it necessary to earth metallic casing of electric appliance?
4. What is the principle of electric motor? State the function of
 - (i) split ring
 - (ii) field magnet used in electric motor.
5. (a) What is short circuiting?
 (b) What is overloading? How can you avoid overloading?
6. (a) Distinguish between A.C and D.C?
 (b) Which source produces alternating current?
7. (a) Define the term current rating of an electric fuse?
 (b) Name the material used to make electric fuse?
 (c) Name two safety measure commonly used in electric circuit and appliances?
8. What precaution should be taken to avoid the overloading of domestic electric circuit?
9. Current- time graph from two different sources are shown in the figure.



- (i) Name the type of current shown by graph (I) and (II)?
- (ii) Name any one source of shown by (I) and (II)?
- (iii) What is frequency of current in case (II)?
- (iv) Write two difference between current shown by (I) and (II)?

10. Explain the principle, construction and working of an electric motor with a help of labeled diagram?
11. Explain the underlying principle and working of an electric generator by drawing a labeled diagram. What is the function of brushes?
12. A coil of insulated copper wire is connected to a galvanometer. What will happen if a bar magnet is
 - (i) pushed into the coil.
 - (ii) withdrawn from inside the coil
 - (iii) held stationary inside the coil?
13. An electric oven of 2 kW power rating is operated in a domestic electric circuit (220V) that has a current rating of 5.A. What result do you expect? Explain.
14. State Fleming's left-hand rule.
15. List the properties of magnetic lines of force.
16. What is a solenoid? Draw magnetic field lines showing the magnetic field inside and outside the current carrying solenoid?