

ATOMIC ENERGY EDUCATION SOCIETY

DISTANCE TEACHING PROGRAMME

CLASS X SCIENCE

WORK SHEET-2

CHAPTER: MAGNETIC EFFECT OF CURRENT (MODULE 3)

1. At the time of short circuit, the current in the circuit.

- (a) Vary continuously (b) reduced considerably
(c) Increases heavily (d) does not change

Answer: Increases heavily

2. The most important safety device method used for protecting electrical appliances from short circuiting or overloading is

- (a) Earthing (b) use of stabilizer (c) use of electric meter (d) fuse

3. The essential difference between A.C. generator and a D.C. generator is that:

- (a) A.C. generator has an electromagnet while a D.C. generator has permanent magnet.
(b) D.C. generator will generate a higher voltage
(c) A.C. generator will generate a higher voltage
(d) A.C. generator has slip rings while the D.C. generator has commutator.

4. To convert an AC generator into DC generator

- (a) split-ring type commutator must be used
(b) slip rings and brushes must be used
(c) a stronger magnetic field has to be used
(d) a rectangular wire loop has to be used

5. Where do we connect a fuse: with live wire or with neutral wire?

6. Name two sources of direct current.

7. According to Fleming's right hand rule, which part of right hand indicates the

Movement of conductor?

8. Suppose your science teacher asks you to demonstrate the phenomena of EMI with following materials:

- a. A non conducting cylinder b. A non conducting cylinder c. A battery d. A plug key
e. A galvanometer

i. Draw a labeled diagram of your demonstration setup.

ii. How will you prove the phenomena of EMI?

9. What is the role of fuse, used in series with any electrical appliance? Why should a fuse with defined rating not be replaced by one with a larger rating?

10.(a) When does an electric short circuit occur?

(b)What is the function of an earth wire? Why is it necessary to earth metallic appliances?