

Electrical Power, Work, Energy MCQ Questions & Answers Pdf

1. A constant voltage is applied between two ends of a uniform metallic wire. Some heat is developed. If both length and radius of wire are halved, the heat developed in the same duration is

- a. half
- b. twice
- c. one fourth
- d. same

Ans: A

2. An electric fan and a heater are marked as 100 W, 220 V and 1000 W, 220 V respectively. The resistance of heater is

- a. zero
- b. greater than that of fan
- c. less than that of fan
- d. equal to that of fan

Ans: C

3. A constant voltage is applied between the two ends of a metallic wire of uniform area of cross section. Some heat is developed. The heat is doubled if

- a. both length and radius are halved
- b. both length and radius are doubled
- c. the radius of wire is doubled
- d. the length of wire is doubled

Ans: B

4. What is immaterial for a fuse?

- a. its resistivity
- b. its radius

- c. its length
- d. none of the above

Ans: C

5. Appliances based on heating effect of current work on

- a. d.c. only
- b. a.c. only
- c. both d.c. and a.c.
- d. none of the above

Ans: C

6. A fuse wire is made of

- a. copper
- b. tungsten
- c. lead tin alloy
- d. nichrome

Ans: C

7. Fuse wire is a wire of

- a. high resistance and low melting point
- b. high resistance and high melting point
- c. low resistance and low melting point
- d. low resistance and high melting point

Ans: A

8. Lamps used for house lighting are connected in

- a. series
- b. parallel
- c. mixed grouping

d. arbitrary manner

Ans: B

9. Two electrical appliances are connected in parallel to a constant voltage supply. If current in one appliance is less than the second appliance by 1%, then power of the first appliance will be less by

a. 1%

b. 2%

c. 4%

d. 5%

Ans: A

10. A constant voltage is applied across the ends of a conductor. The heat produced is

a. directly proportional to length

b. inversely proportional to length

c. directly proportional to square of length

d. none of above

Ans: B