

28 Multiple choice questions

1. a material that allows electric charge to flow easily through it
 - a. coulomb
 - b. insulator
 - c. induction
 - d. conductor

2. a number of coils of wire wrapped around a soft metal core which affects a compass and attracts iron objects when connected to a source of current
 - a. electric field
 - b. electric shock
 - c. electron
 - d. electromagnet

3. the unit of the fundamental quantity of electric current; 1 ampere = 1 coulomb per second
 - a. ampere (A)
 - b. field
 - c. ammeter
 - d. dipole

4. a region in which a physical force is operating; a region of influence
 - a. field
 - b. ammeter
 - c. dipole
 - d. fuse

5. a material that electric charge finds very difficult to move through
 - a. coulomb
 - b. conductor
 - c. insulator
 - d. induction

6. electric charge that flows from positive to negative
 - a. electric current
 - b. electric circuit
 - c. conventional current
 - d. conductor

7. where current flows through a person
 - a. electric shock
 - b. electric field
 - c. electric charge
 - d. electric circuit

8. a meter used to measure electric current
 - a. ammeter
 - b. field
 - c. ampere (A)
 - d. dipole

9. the force per unit positive charge acting on a charge in an electric field
 - a. electric field
 - b. electric current
 - c. electric field strength
 - d. electric field direction

10. the process of charging one object by bringing it near another charged object
 - a. electron
 - b. induction
 - c. conductor
 - d. insulator

11. the difference in electric potential energy per unit charge
 - a. electric potential energy
 - b. electromotive force (emf)
 - c. electric potential difference (V)
 - d. electric field direction

12. the energy stored in a charge placed in an electric field
 - a. electric charge
 - b. electric generator
 - c. electric potential difference (V)
 - d. electric potential energy

13. a device used to convert mechanical energy into electrical energy
 - a. electric generator
 - b. electric field
 - c. electric circuit
 - d. electromagnet

14. the region in which a charge experiences an electric force
 - a. electric field
 - b. electric charge
 - c. electric circuit
 - d. electric shock

15. current that flows in one direction only
 - a. alternating current (AC)
 - b. ampere (A)
 - c. electric current
 - d. direct current (DC)

16. an electric current that reverses direction periodically
 - a. electric current
 - b. direct current (DC)
 - c. alternating current (AC)
 - d. conventional current

17. a negatively charged subatomic particle found in all neutral atoms
 - a. electron
 - b. electromagnet
 - c. field
 - d. induction

18. a device used to stop electric current when there is a fault in an electric circuit
 - a. circuit breaker
 - b. conductor
 - c. ammeter
 - d. insulator

19. the connection to the earth of an appliance to protect a user from electrocution
 - a. conductor
 - b. electron
 - c. induction
 - d. earth connection

20. the property of matter which allows it to attract opposite charges and repel similar charges; can be positive or negative
 - a. electric field
 - b. electric charge
 - c. electric current
 - d. electric shock

21. the energy per unit charge supplied by a source of electric current; it is equal to the open circuit potential difference across a cell or battery
 - a. electric field
 - b. electromotive force (emf)
 - c. electric current
 - d. electric circuit

22. consists of a source of electric energy, a conduction pathway and a device that uses electric energy
 - a. electric shock
 - b. electric circuit
 - c. electric current
 - d. electric charge

23. the rate of flow of electric charge past any point in a circuit
 - a. electric charge
 - b. electric field
 - c. electric current
 - d. electric circuit

24. the unit of electric charge equal to one ampere second
 - a. dipole
 - b. field
 - c. fuse
 - d. coulomb

25. the average speed of movement in one direction of charge carriers in a conductor
- electron
 - field
 - dipole
 - drift velocity
26. the direction in which a positive charge would experience a force if placed in the field
- electric circuit
 - electric field strength
 - electric field
 - electric field direction
27. two small equal but opposite charges separated by a distance
- field
 - dipole
 - coulomb
 - fuse
28. a device consisting of a wire that melts when a predetermined current flows through it
- fuse
 - field
 - coulomb
 - dipole