

19 Multiple choice questions

1. a method which allows the direction of the force on a current-carrying wire to be determined
 - a. transformers
 - b. right-hand palm rule
 - c. magnetic flux
 - d. shield wire

2. a single wire attached to the top of transmission lines to protect against lightning strikes, also known as "overhead earth wire"
 - a. shield wire
 - b. torque
 - c. stators
 - d. slip rings

3. the ratio of the number of turns in the primary coil to the number of turns in the secondary coil; also equal to the ratio of the voltages and inversely to the ratio of the currents
 - a. rotors
 - b. slip rings
 - c. transformers
 - d. turns ratio

4. the number of flux lines through unit area perpendicular to the magnetic field
 - a. magnetic force
 - b. power transmission
 - c. magnetic flux
 - d. magnetic flux density or magnetic induction

5. a measure of the number of lines of force emerging from a given area
 - a. magnetic force
 - b. magnetic flux
 - c. shield wire
 - d. magnetism

6. electrical devices that allow voltages to be transferred from one circuit to another, generally with a change in voltage and current
 - a. turns ratio
 - b. stators
 - c. transformers
 - d. rotors

7. the property of certain materials that allows them to attract iron objects
 - a. rotors
 - b. magnetic force
 - c. magnetism
 - d. magnetic flux

8. conductors, often graphite, that allow the current to be taken from an AC generator or supplied to an AC motor
 - a. slip rings
 - b. rotors
 - c. shield wire
 - d. stators

9. the transfer of electricity from power stations to the consumer, done at high voltages to minimise heating loss
 - a. power transmission
 - b. step-up transformer
 - c. transformers
 - d. turns ratio

10. a transformer in which the voltage in the secondary coil is less than the voltage in the primary coil
 - a. transformers
 - b. step-down transformer
 - c. power transmission
 - d. step-up transformer

11. a transformer in which the voltage in the secondary coil is greater than the voltage in the primary coil
 - a. stators
 - b. step-down transformer
 - c. step-up transformer
 - d. transformers

12. a region of influence surrounding a magnet
 - a. magnetic flux
 - b. motor effect
 - c. magnetism
 - d. magnetic force

13. sensitive electric meters that use the torque on a current-carrying coil in a magnet field to measure the current or voltage
 - a. transformers
 - b. slip ring commutators
 - c. magnetic force
 - d. moving coil galvanometers

14. when a current-carrying conductor in a magnetic field experiences a force
 - a. torque
 - b. motor effect
 - c. magnetism
 - d. rotors

15. the turning effect of a force
 - a. torque
 - b. rotors
 - c. motor effect
 - d. stators

16. the stationary part of an electric motor or generator, in some cases carrying the induced current
 - a. stators
 - b. torque
 - c. slip rings
 - d. rotors

17. motor devices that reverse the direction of the current each half cycle; used in DC electric motors and generators
 - a. slip rings
 - b. starting resistance
 - c. stators
 - d. slip ring commutators

18. the rotating part in an electric motor or generator, consisting of a laminated soft-iron core and conducting coils
- rotors
 - torque
 - slip rings
 - stators
19. placed in series with a motor when the back emf at start up is insufficient to limit the current to prevent burn-out
- stators
 - turns ratio
 - starting resistance
 - slip rings