

## SNS COLLEGE OF ENGINEERING, COIMBATORE – 641 107 DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ACADEMIC YEAR 2023-2024 (EVEN SEMESTER)



## **UNIT III: WIRING, GROUNDING, AND SAFETY**

- 1. The main purpose of grounding is to:
  - a) Increase the voltage.
  - b) Provide a path for fault current.
  - c) Increase resistance.
  - d) Decrease the current.
  - o Answer: b) Provide a path for fault current.
- 2. In conduit wiring, the conduits are made of:
  - a) Plastic.
  - b) Copper.
  - c) Steel.
  - d) Aluminum.
  - o Answer: c) Steel.
- 3. Which type of wiring is most commonly used in residential buildings?
  - a) Conduit wiring.
  - b) Cleat wiring.
  - c) Casing and capping wiring.
  - d) Batten wiring.
  - o Answer: a) Conduit wiring.
- 4. One of the main causes of electrical accidents is:
  - a) Short circuits.
  - b) Overloading.
  - c) Improper grounding.
  - d) All of the above.
  - o Answer: d) All of the above.
- 5. The conduit wiring system is preferred because:
  - a) It is cheap.
  - b) It is easy to install.
  - c) It is safe and durable.
  - d) It looks better.
  - o Answer: c) It is safe and durable.
- 6. In residential wiring, the main distribution board is connected to:
  - a) Appliances.
  - b) Main supply.
  - c) Ground.
  - d) Lights.
  - Answer: b) Main supply.
- 7. Which type of grounding is used for safety purposes?
  - a) System grounding.
  - b) Equipment grounding.
  - c) Neutral grounding.

- d) All of the above.
- o Answer: b) Equipment grounding.
- 8. The primary cause of electrical fires is:
  - a) Proper insulation.
  - b) Use of high-quality materials.
  - c) Short circuits.
  - d) Correct installation.
  - o Answer: c) Short circuits.
- 9. The purpose of a fuse in an electrical circuit is to:
  - a) Increase the current.
  - b) Decrease the voltage.
  - c) Protect the circuit from overcurrent.
  - d) Provide a path to ground.
  - o Answer: c) Protect the circuit from overcurrent.
- 10. Which of the following is a safety device?
  - a) Resistor.
  - b) Capacitor.
  - c) Fuse.
  - d) Inductor.
  - o Answer: c) Fuse.
- 11. The term "hot wire" in electrical wiring refers to:
  - a) A live wire carrying current.
  - b) A ground wire.
  - c) A neutral wire.
  - d) None of the above.
  - Answer: a) A live wire carrying current.
- 12. Which of the following is not a type of conduit used in wiring?
  - a) Rigid metal conduit.
  - b) Flexible metal conduit.
  - c) Liquid-tight flexible conduit.
  - d) Plastic conduit.
  - Answer: d) Plastic conduit.
- 13. Accident prevention in electrical installations involves:
  - a) Proper installation.
  - b) Regular maintenance.
  - c) Use of protective devices.
  - d) All of the above.
  - Answer: d) All of the above.
- 14. In a residential wiring layout, switches are connected:
  - a) In series with the load.
  - b) In parallel with the load.
  - c) In series with the power source.
  - d) In parallel with the power source.
  - Answer: a) In series with the load.
- 15. The purpose of a circuit breaker is to:
  - a) Increase the current.
  - b) Decrease the voltage.
  - c) Automatically disconnect the circuit during fault conditions.

- d) Provide a manual switch for turning off the circuit.
- o Answer: c) Automatically disconnect the circuit during fault conditions.