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- Where flexible tubing is used to encase the conductors, the tubing shall extend from the last insulating support to NOT less than 6.4 mm.
- Metal raceways, enclosures, frames and other non-current carrying metal parts of electric equipment shall be kept at least 1,900 mm distance from lightning rod conductors.
- Where no standard electrical equipment of the exact size or rating is available and the next larger size is neither available the next smaller size or rating maybe used provided a special permission is obtained from **Electrical Inspector**.
- Instruments, pilot lights, potential transformers and other switchboard devices with
 potential coils shall be supplied by a circuit that is protected by a standard over-current
 device rated up to 15 A.
- Guy is a wire or other mechanical member having one end secures and the other end fastened to a pole maintained under tension.
- 6. Below the factors that affect the ampacity of an electrical conductor EXCEPT one. Which one is this?

✓ Insulation resistance

- ✓ Length of the conductor
- ✓ Conductor material
- ✓ Cross-sectional area of the conductor
- For circuits over 600 V nominal, conductors shall NOT be bent to a radius less than 12 times the diameter for shielded or lead covered conductors.
- 8. Which of the following statement about over-current devices is NOT correct?
 - ✓ It shall be located where they will not be exposed to physical damage.
 - ✓ It shall be readily accessible.
 - It can be located inside clothes closets.
 - ✓ In a multi-family dwelling, each occupant shall have ready access to over-current device protecting his occupancy.
- 9. Which of the following statements is NOT true?
 - ✓ Conductors in raceways shall be continuous between outlets.
 - $\checkmark \quad$ Metal raceways, boxes, cabinets and fittings shall be grounded.
 - Metal or non-metallic raceways shall be continuous between cabinets, boxes or other enclosures.
 - Raceway shall be used as a means of support for other raceways.
- For receptacle outlets, each single or each multiple receptacle on one strap shall be considered NOT less than 180 VA.
- 11. Corner joints on a gutter shall be made tight, where the assembly is held together by rivets or bolts. The spacing shall NOT be more than **300 mm**.
- 12. **360 degrees** is the total number of mechanical degrees that a PVC conduit run maybe bent between pull joints (pull boxes, junction boxes or utility boxes).

- 13. The minimum size of wire used in electrical wiring is the former #14 AWG. Under the SI standard in the PEC, what is the diameter of this wire? (1.2 mm, 2.0 mm, 1.5 mm, 1.6 mm).
- 14. **Pull box** is a box with a blank cover which is inserted in one or more runs of raceway to facilitate pulling of the conductors.
- 15. The neutral conductor from the neutral point of the transformer or generator to its connection point to the grounding impedance shall be fully insulated.
- The sum of the cross sectional area of all conductors in a wireway must NOT exceed 20% of the cross-sectional area of the wireway.
- Circuit containing electric discharge lighting transformer exclusively shall NOT be rated in excess of 30 A.
- For ranges of 8.75 kW or more in rating, the minimum branch circuit required shall be 40
 A.
- Lighting fixtures shall be wired with a fixture flexible cord with a cross-sectional area of NOT less than 0.75 mm².
- If the setting of over-current device in a circuit ahead of equipment is 60 A, the minimum required grounding conductor using copper is 5.5 mm².
- 21. Mineral insulated metal sheathed cable shall be permitted in any of the following installations EXCEPT one. Which one is this?
 - √ For control circuits
 - ✓ Where exposed to oil and gasoline
 - √ For feeder circuits
 - Where exposed to corrosive atmosphere
- 22. Conductors which run above the top level of a window shall be permitted to be less than 1,000 mm but in no case shall be less than 300 mm.
- For barber shops and beauty parlors, the general lighting load per square meter of area shall be 24 watts.
- Liquidtight flexible non-metallic conduit shall be permitted to be used: for direct burial, where flexibility is required, in exposed or concealed locations.
- 25. Outlet boxes shall NOT be used as a sole support for ceiling fans.
- Flexible metal conduits must NOT be used in wet locations, hoistways, and storage battery rooms.
- 27. For 25 to 50 A circuits, the minimum insulation resistance is 250,000 ohms.
- 28. **75°C** is the maximum operating temperature of type THWN conductor.
- Counterpoise is a conductor encircling a building and interconnecting all ground terminals.
- The conductor connecting the neutral point of the transformer or generator to the grounding impedance shall be permitted to be installed in a separate raceway.
- 31. The total load on over-current device located in a panel board shall NOT exceed to **80%** of its rating.
- 32. For underground feeder and branch circuits, UF type of conductors shall be used.
- 33. Guy insulator, an insulating element, generally of elongated form with transverse holes or slots for the purpose of insulating two sections of a guy or provide insulation between structure and anchor.
- 34. **30 A** is the ampacity of a 5.5 mm² TW copper conductor.