

NAME: _____

DATE: _____

Choose the best answer. Each question has one best answer.

Part A Quiz 8A:1-5

8A:1) What is a Lock-Out / Tag-Out Device?

- ☐ A) Part of a lottery game
- ☐ B) Locks people out of campgrounds
- ☐ C) Dogs need a tag to stay in a campground
- ☐ D) It's a lock on a circuit breaker or panel to prevent power from accidentally being turned on

8A:2) Proper hand placement around live circuits

- ☐ A) Put both hands in the circuit panel so you're properly grounded
- ☐ B) Put one hand on the pedestal box so you're properly grounded
- ☐ C) One hand at a time near live electricity and the other hand in your pocket
- ☐ D) Doesn't matter since the voltage is too low to hurt or kill you

8A:3) What PPE Should You Wear?

- ☐ A) Whatever makes you comfortable
- ☐ B) Safety glasses and cotton clothing (at the very least)
- ☐ C) Needs to have bright colors
- ☐ D) You only need to wear Personal Protection Equipment in the rain

8A:4) Does your campground need an AED?

- ☐ A) No: It's a public place so everybody is on their own
- ☐ B) Probably: Most states require campgrounds to have an Automatic External Defibrillator in a visible location that's available 24/7
- ☐ C) No: They're too expensive and campers will steal them
- ☐ D) Yes: But they need to be kept locked up in the office

8A:5) Quick testing for stray voltage with an NCVT

- ☐ A) Lick your finger and touch the box to see if it's electrified
- ☐ B) An NCVT can't find a pedestal with stray voltage
- ☐ C) A NCVT will beep a foot away from a stray voltage pedestal
- ☐ D) Not needed since it's only Ghost Voltages which are not dangerous

Part B Quiz 8B:1-5

8B:1) What's the difference between Static and Dynamic Load Testing?

- ☐ A) Static is just static electricity
- ☐ B) Dynamic load testing is only for generators
- ☐ C) Static loads are continuous and Dynamic loads are only on for a fraction of a second
- ☐ D) Dynamic loads are continuous and Static loads are only for a fraction of a second

8B:2) What is an acceptable pedestal voltage drop under load?

- ☐ A) 120 volts
- ☐ B) 240 volts
- ☐ C) 10 volts
- ☐ D) 0 volts

8B:3) Is a Hughes Autoformer allowed in campgrounds?

- ☐ A) No: They're a code violation
- ☐ B) Yes: They were never a code violation
- ☐ C) Yes and No: They were a code violation for a while but are now allowed
- ☐ D) No: They steal power from other campsites

8B:4) How does a loose neutral show up in a static load test?

- ☐ A) The voltage will drop evenly in L1 and L2
- ☐ B) L1 voltage will go down and L2 will go up
- ☐ C) L2 voltage will go down and L1 will go up
- ☐ D) B & C

8B:5) Is Static or Dynamic load testing safe to do with other RVs on the loop?

- ☐ A) Dynamic load testing is safe, Static load testing is dangerous
- ☐ B) Static load testing is safe, Dynamic load testing is dangerous
- ☐ C) Both Static and Dynamic Load testing are dangerous to other RVs
- ☐ D) Both Static and Dynamic Load testing are safe to other RVs

Part C Quiz 8C:1-5

8C:1) What is ground impedance?

- ☐ A) How hard it is to pound a ground rod into the dirt
- ☐ B) It's the ability of the EGC to carry fault current that will trip a circuit breaker in the event of a short circuit
- ☐ C) Ground wires don't have impedance
- ☐ D) A & C

8C:2) What is Dynamic Neutral/Bond testing?

- ☐ A) A short (few milliseconds) load is applied between the hot wire and ground wire
- ☐ B) You plug in the meter quickly
- ☐ C) There's no such thing as Neutral Bond
- ☐ D) It tests the impedance of the grounding rod to earth

8C:3) Is a grounding rod needed at each pedestal?

- ☐ A) Not required, but not prohibited
- ☐ B) Not required and not allowed
- ☐ C) Required at every pedestal
- ☐ D) None of the above

8C:4) How many ohms is an acceptable EGC bond impedance?

- ☐ A) Over 1,000 ohms
- ☐ B) Over 100 ohms
- ☐ C) Less than 1,000,000 ohms
- ☐ D) 1 ohm or less

8C:5) What is a GMI and when will they show up in campgrounds

- ☐ A) Gopher Mound Index and testing will start in 2026
- ☐ B) Ground Monitor Interrupter that need to be in all pedestal by late 2026
- ☐ C) Ground Monitor Interrupter that's required in all new RVs by late 2026
- ☐ D) You're making this up. There's no such thing

Part A Quiz 8D:1-5

8D:1) Is 3-phase power dangerous in campgrounds?

- ☐ A) Yes: 3-phase in a pedestal is too much power
- ☐ B) No: Properly installed 3-phase is safe and has less voltage drop
- ☐ C) Only 3-phase Delta service is totally safe
- ☐ D) Only 3-phase WYE service is totally safe
- ☐ E) Both B & D

8D:2) Why does 3-phase measure 208 volts instead of 240 volts?

- ☐ A) Split-Phase service has a 180-degree phase shift, so L1 to Neutral is 120 volts, which is one-half of the incoming 240-volts
- ☐ B) 3-phase WYE has a 120-degree phase shift so L1 to Neutral is 120 volts while A to B, B to C and C to A each measure 240-volts
- ☐ C) 3-phase WYE has a 120-degree phase shift so A, B or C phase to Neutral is 120 volts and A to B, B to C and C to A each measure 208-volts
- ☐ D) A & B
- ☐ E) A & C

8D:3) Is 3-Phase WYE service dangerous?

- ☐ A) Some older campground panels were High-Leg Delta and dangerous
- ☐ B) A properly installed 3-phase WYE service is perfectly safe
- ☐ C) All 3-phase power in campgrounds is dangerous
- ☐ D) 3-phase voltage is too high and will damage air conditioners
- ☐ E) A & B
- ☐ F) C & D

8D:4) Is 3-phase service better than single/split-phase??

- ☐ A) Yes: It requires fewer conductors and has less voltage drop
- ☐ B) No: It requires more conductors and has higher voltage drop
- ☐ C) No: All 50-amp RVs need a full 240 volts
- ☐ E) No: The microwave clock will run too fast

8D:5) Do most campgrounds have 3-phase or split-phase service?

- ☐ A) Most old campgrounds have 3-phase service
- ☐ B) Most new campgrounds have single-phase service
- ☐ C) Many new campgrounds have 3-phase service
- ☐ D) Most old campgrounds have single-phase service
- ☐ E) C & D
- ☐ F) A & B