



Multiple choice questions pick the most correct answer.

1. Which of the following is not a common cause of arc flash?

- A. Buildup of conductive dust and dirt.
- B. Inadequate PPE.
- C. A dropped tool.
- D. Corrosion.
- E. Accidental contact with electrical systems.
- F. Both A and D are not common causes of arc flash.

2. If you have more than two years experience working on live equipment, and you just need to quickly open a cover to inspect a fused disconnect, the potential for an arc flash is so low that protective clothing is not required.

- A. True, if the inspection will take less than 60 seconds.
- B. False. Arc flash protective clothing is required any time someone could be exposed to discharge energy of 1.2 cal/cm².
- C. False. Cotton clothing, safety glasses and gloves are always required.
- D. True, if the voltage is 480V or less.
- E. False. Three years of experience with no accidents is required.
- F. True, if the electrical device has been inspected within the past six months and the voltage is less than 480V.

3. How can you determine if a device could expose you to a discharged energy of 1.2 cal/cm² or greater?

- A. Read the user's manual for the device.
- B. Attend your company's arc flash training seminar.
- C. Read the arc flash label on the device.
- D. If you remain at least one-half meter from the device the discharge energy will always be lower than 1.2 cal/cm².
- E. Answers A & B.
- F. None of the above.

4. What information is currently required by NFPA 70E to be on an arc flash warning label?

- A. The required PPE.
- B. The flash protection boundary.
- C. The incident energy at 18 inches.
- D. The prohibited shock approach boundary.
- E. A or C.
- F. None of the above.

5. Most arc flashes happen on...

- A. 120V to 480V equipment.
- B. Equipment more than 20 years old.
- C. 2.4kV to 34.5kV equipment.
- D. Equipment needing repair or being repaired.
- E. Answers B & C.
- F. None of the above.



6. What is the best way to prevent arc flash injuries?

- A. Always wear the proper PPE.
- B. Arc flash injuries can never be completely eliminated.
- C. Check the circuit for evidence of current overload.
- D. De-energize equipment before starting to work on the equipment.
- E. Follow the instructions on the arc flash label.
- F. Both A & E.

7. Activities with high potential for exposure to arc flash include:

- A. Troubleshooting live circuits
- B. Opening or closing circuits
- C. Grounding circuits
- D. All of the above

8. Potential arc flash causes may include:

- A. Uninsulated tool contact with a live conductor
- B. Loose wire connections
- C. Accidental contact with live conductors
- D. All of the above

True or False questions

- 9. T/F When working around exposed live conductors insulated tools must be used.
- 10. T/F The primary method for protecting employees from arc flash is to de-energize live parts prior to working on them using proper lockout/tagout procedures.



Arc Flash Quiz Answers

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1. **(B)**
PPE, Personal Protective Equipment, is used to provide some protection against the effects of an arc flash. The type of PPE required depends on the level of the arc flash hazard. Inadequate PPE can result in a more serious injury should there be an arc flash. However, PPE is not a cause of arc flash.
2. **(B)**
If there is the potential for an energy discharge exposing someone to 1.2 cal/cm² or greater, protective clothing is required. Use the information on arc flash labels to determine the hazard category and always wear the appropriate PPE.
3. **(C)**
The arc flash label will give various approach boundary limits that determine the qualifications you must have to be within a certain distance of the device and PPE that is required.
4. **(E)**
Current standards require that arc flash labels contain PPE or Incident energy levels.
5. **(A)**
The majority of arc flash incidents occur on 120V to 480V equipment.
6. **(D)**
The best way to prevent an arc flash injury to is de-energize the equipment. This completely eliminates the potential for an arc flash while workers are exposed to the equipment. The only time equipment should not be de-energized is when de-energizing would result in a greater hazard to people or a process than leaving the equipment energized.
7. **(D)**
Anytime you are in contact with live circuits or parts the potential for and arc flash or electrocution is increased.
8. **(D)**
Uninsulated tool contact with a live conductor, Loose wire connections, Accidental contact with live conductors

True or False

9. **True**
10. **True**