

**2016 TN Mine Rescue Contest
Caryville, TN
Written Test Answers– Mine Rescue Field Competition**

Name _____

Company _____

Team Name _____

Contest Position No. _____

Team Member No. _____

Directions: Circle the letter preceding the correct answer to each of the following questions. Circle only one answer per question.

1. The Command Center is the hub of rescue and recovery operations and is typically staffed and controlled by a mine emergency “command group.” This group is generally comprised of:
 - A. Mine management personnel
 - B. Federal and state officials
 - C. Union representatives
 - D. All of the above (p.1-3)

p. 1-3... mine emergency “command group.” This group is generally comprised of mine management personnel, federal and state officials, and union representatives

2. Federal regulations require mines to have and post a Mine Rescue Notification Plan for notifying all the mine rescue team members that will be needed to assist in the rescue and recovery operation. This regulation is:
 - A. 30 CFR Section 49.9 (p.1-3)
 - B. 30 CFR Section 50.2
 - C. Section 7(3) of the MINER Act of 2006
 - D. 30 CFR Section 46.6(a)

3. Incoming traffic on the roads leading to the mine property should also be regulated by authorized personnel to keep unnecessary vehicles off the roads so that they can remain open for needed personnel, supplies, and emergency vehicles.

A. True p. 1-4 B. False

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14. Although an asphyxiant, nitrogen is considered nontoxic.

- A. True (p.2-14) B. False

15. What is the second largest component of air?

- A. Nitrogen
B. Oxygen (p. 2-14)
C. Argon
D. Helium

16. An elevated nitrogen content indicates an oxygen-rich atmosphere.

- A. True B. False(p.2-15)

An elevated nitrogen content indicates an oxygen-deficient atmosphere.

17. Although carbon dioxide is both colorless and odorless at high concentrations it may produce an acid taste.

- A. True (p.2-15) B. False

Carbon dioxide is colorless and odorless. High concentrations may produce an acid taste.

18. The presence of NO₂ above normal ambient levels for a continued period of time definitely indicates there is a fire somewhere in the mine.

- A. True B. False (p.2-17)

The presence of CO above normal ambient levels for a continued period of time definitely indicates there is a fire somewhere in the mine.

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27. When sealing a mine fire, the only way to keep the air flowing over the fire area is to leave one intake airway and one exhaust airway unsealed while other airways are being sealed.

A. True (p.5-22)

B. False

When sealing a mine fire, the only way to keep the air flowing over the fire area is to leave one intake airway and one exhaust airway unsealed while other airways are being sealed.

28. A Class D fire involves non-combustible metals.

A. True

B. False (p. 5-50)

Class D fires – Fires that involve combustible metals

29. When _____ is the ventilation method of recovery being used, be sure that all unnecessary personnel are out of the mine before air is actually directed into the sealed area.

A. direct ventilation (p.7-9)

B. progressive ventilation

When this method of recovery is being used, be sure that all unnecessary personnel are out of the mine before air is actually directed into the sealed area.

30. Gas detectors must measure concentrations of methane from 0.0 percent to 50 percent of volume, oxygen from 0.0 percent to at least 20 percent of volume, and carbon monoxide from 0.0 parts per million to at least 9,999 parts per million.

A. True

B. False (p.2-3)

...methane from 0.0 percent to **100** percent of volume, oxygen from 0.0 percent to at least 20 percent of volume, and carbon monoxide from 0.0 parts per million to at least 9,999 parts per million.

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