

Southeast Regional Mine Rescue

Day 1

Written Test

1. Why should you know about the characteristic color, odor, and taste of gases you may encounter?
 - A. The characteristic color, odor, or taste may be the first clue a team has they are in an oxygen deficiency atmosphere.
 - B. The characteristic color and, if the team is barefaced, odor or taste of a gas may be the first clue a rescue team has that the gas is present in the mine.
 - C. The characteristic color, odor and taste may be an indication that the mine is on fire.

2. How do you protect yourself in an oxygen-deficient atmosphere?
 - A. Wear a filter type SCSR
 - B. Wear a mask to filter the air
 - C. Wear an SCBA, which supplies you with oxygen.

3. Normal air contains approximately what percent oxygen?
 - A. 21%
 - B. 18%
 - C. 17.5

4. Carbon monoxide is?
 - A. Detected during a mine fire or explosion.
 - B. A product of the breathing process
 - C. A gas found in all mines.

5. An elevated concentration of nitrogen in mine air can be harmful because?
 - A. It is highly toxic.
 - B. It can lower the H₂O content of the air.
 - C. It can lower the oxygen content of the air.

6. Atmospheric pressure and temperature are important factors because they?
 - A. Can cause false readings on gas detectors.
 - B. Affect the rate of diffusion of a gas by ventilation
 - C. Lower oxygen content in the mine.

7. Explosions in coal mines are most often caused by ignitions of?
 - A. Hydrogen
 - B. Carbon Dioxide
 - C. Methane

8. The first indications that an explosion has occurred are often very similar to those of?
 - A. A large roof fall
 - B. A fan stoppage
 - C. A water inundation

9. Burning materials that give off extremely toxic gases in addition to carbon monoxide are?
- A. Paper and trash
 - B. Neoprene and other synthetic rubber compounds
 - C. Hydraulic oil
10. The preferred type of hand-held extinguisher for teams is a dry chemical type that contains?
- A. Sodium bicarbonate
 - B. Potassium chloride
 - C. Monoammonium phosphate
11. Prior to rescue team exploration, the first step to take after a disaster is to?
- A. Examine all mine openings
 - B. Establish a Fresh Air Base
 - C. Proceed as far into the mine as possible barefaced
12. The purpose of rescue team exploration is to?
- A. Determine conditions underground, locate missing miners and locate clues or indications of missing miner's location
 - B. Map conditions of the mine for future use by mine management
 - C. Call out conditions to determine what caused the event
13. If at all possible, entry into the mine should be made on?
- A. A return airway
 - B. An intake airway
 - C. The belt entry

14. Barefaced exploration should be attempted only when?

- A. Miners are trapped in the mine
- B. A fresh air base is established
- C. A backup mine rescue team with apparatus is immediately available

15. In advancing a fresh air base, after you put up the air lock the team should?

- A. Shut off and remove your apparatus since you are in fresh air
- B. Perform gas test in all dead ends and high places between the old and new fresh air base to ensure that all gases have been flushed from the area.
- C. Proceed inby the fresh air base and let the backup team check for gases between the old and new fresh air base.

Southeast Regional
Day #1 Written Test Answer Sheet

1. B
2. C
3. A
4. A
5. C
6. B
7. C
8. A
9. B
10. C
11. A
12. A
13. B
14. C
15. B