Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Team \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Atmospheric pressure and temperature are important factors because they:

a. affect the rate of diffusion of a gas by ventilation

b. can cause false readings on gas detection instruments

c. lower oxygen content in the mine

2. The type of coal mine where the greatest amount of methane would be likely to be found would be a:

a. drift mine with tight and compact adjoining strata

b. drift mine with loose or broken adjoining strata

c. shaft mine with tight and compact adjoining strata

1. Which of the following is not true of sulfur dioxide?

a. it is explosive

b. it is highly toxic

c. it is highly soluble in water

4. Accumulations of hydrogen in the mine atmosphere are dangerous because hydrogen:

a. is highly toxic

b. is highly soluble in water

c. is highly explosive

5. Normal air contains approximately what percent oxygen?

a. 15%

b. 21%

c. 31%

6. Two instruments commonly used to measure velocity of airflow in a mine are:

a. Smoke tube.

b. Smoke tube and CO detector.

c. Smoke tube and anemometer.

7. If at all possible, entry into the mine should be made on:

a. A return airway.

b. An intake airway.

c. The main haulageway.

8. 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 as possible into the mine without apparatus.

9. Barefaced exploration should be attempted only when:

a. No breathing apparatus is available.

b. Miners are trapped in the mine.

c. A backup mine rescue team with apparatus is immediately available.

10. Prior to a mine rescue team passing through a door or stopping/bulkhead behind which conditions are not definitely known, they should:

a. Ask the Fresh Air Base to send in the backup team.

b. Erect an air lock to prevent the mixing of atmospheres.

c. Open the door or stopping/bulkhead, and wait at least 10 minutes so that any harmful gases are diffused.

11. If a team member experiences problems with his or her apparatus inby the Fresh Air Base, the team member should:

a. Be sent back to the Fresh Air Base with another team member.

b. Switch to the apparatus that was carried on the stretcher or stokes basket.

c. With the entire team, return immediately to the Fresh Air Base.

12. The first indications that an explosion has occurred are often very similar to those of:

a. An inundation of water

b. A large roof fall

c. A fan stoppages

13. Burning materials that give off extremely toxic gases in addition to carbon monoxide are:

a. The coal seam itself

b. Hydraulic fluids

c. Neoprene and other synthetic rubber compounds

14. In advancing a Fresh Air Base, after you put up the new air lock, the team should:

a. Come out of the mine.

b. Perform gas tests 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 new Fresh Air Base to explore and let other workers check for any gases outby the new Fresh Air Base.

15. What is a Fresh Air Base (FAB)?

a. The underground base of operations and starting point for rescue and recovery work into irrespirable atmospheres.

b. The underground command center of all rescue or recovery work.

c. The location for mine rescue teams to gather, plan and decide how to conduct a rescue or recovery operation.