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

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

1. From Equipment Required by Law: The regulations state: One portable mine rescue communication system (approved under part 23 of this title) or a sound-powered communication system. (ii) These communication systems shall be at least \_\_\_\_\_\_\_\_ feet in length.

a. 1000

b. 2000

c. 1500

2. A gas that is normally found near the roof or in high places in the mine is said to have a low:

a. level of solubility

b. level of stratification

c. specific gravity

3. 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

4. Acetylene would normally be found in a mine atmosphere where:

a. battery charging stations are located

b. methane has burned or exploded in air with a lowered oxygen content

c. leakage has occurred from adjacent oil or gas wells

5. A characteristic of hydrogen sulfide includes:

a. is an asphyxient

b. is not explosive

c. can be liberated from pools of stagnant water

6. Gases that are neither toxic nor explosive:

a. are not found in mine atmospheres

b. are not dangerous

c. can be dangerous because they can displace oxygen

7. Under what conditions would a team use a smoke tube to determine air velocities? Answer: The smoke tube is used to determine the direction and velocity of slow- moving air, below \_\_\_\_\_ feet per minute.

a. 2000.

b. 120.

c. 1000.

8. Why would a team need to be able to build temporary stoppings quickly and effectively? Answer: Re-ventilation is essential for the advancement of the Fresh Air Base and the flushing out of \_\_\_\_\_\_\_\_\_\_\_\_ gases.

a. toxic.

b. dangerous

c. irrespirable

9. Mine rescue teams should alter existing ventilation:

a. Only when directed to do so by the Command Center.

b. When they encounter smoke.

c. When they encounter high concentrations of methane.

10. During mine rescue team explorations, the main fan:

a. Should be kept running.

b. Should be continually monitored.

c. Both of the above.

11. Mine rescue teams erecting temporary stoppings/Bulkheads in atmosphere with elevated methane readings should:

a. Mine rescue teams should never enter such atmosphere.

b. Leave a corner of the stopping /Bulkheads open for the methane to exit.

c. Use non-sparking tools, nails, and spads.

12. Temporary stoppings/Bulkheads built in a passageway should be placed at least 4 to 6 feet into the passageway in order that:

a. Sufficient space is available to construct a permanent stopping/Bulkhead.

b. It will be protected from further explosions.

c. It will not be affected by fire if a fire should spread to that crosscut.

13. As you advance, report the condition of ventilation controls and \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_. If they are damaged, be specific as to what type of damage they’ve received and how extensive it is.

a. roof conditions.

b. gases encountered.

c. auxiliary fans.

14. Class K fires - Fires that involve combustible cooking media such as oils and grease commonly found in commercial kitchens. A special wet chemical extinguishing agent should be used for extinguishing and suppressing these extremely hot fires that have the ability to \_\_\_\_\_\_\_\_\_.

a. suffocate.

b. explode.

c. reflash.

15. Fire tetrahedron – Tetrahedron used to illustrate the four elements necessary for fire to occur: fuel, oxidizing agent, heat, and \_\_\_\_\_\_\_\_\_\_\_\_ chemical chain reaction.

a. unrestricted

b. uninhibited

c. uncontained