

Southwest Wyoming June 8-10, 2010

Field Written Test

Name: _____ Team: _____

1. A medium-velocity (or “regular”) anemometer is used for measuring velocities from 20 to 2,000 feet per minute.
 - a. True
 - b. False
2. Mines are required to keep exposure to radiation below ____ WLM (working level months) per year.
 - a. 2
 - b. 3
 - c. 4
 - d. 5
3. As little as _____% carbon monoxide can cause death in three hours.
 - a. 0.005
 - b. 5.000
 - c. .005
 - d. .05
4. Hydrogen sulfide is found in high places in the mine because it is a relatively heavy gas?
 - a. True
 - b. False
5. The explosive range for carbon monoxide, in normal air, is 12.5% to 74.5%
 - a. True
 - b. False
6. Rock-strata gas, commonly called rock gas is assumed to be largely nitrogen and _____.
 - a. carbon monoxide
 - b. hydrogen
 - c. hydrogen sulfide
 - d. none of the above

7. Afterdamp is toxic but not oxygen-deficient.
- a. True
 - b. False
8. Methane is most explosive in the 9.5% to 11% range
- a. True
 - b. False
9. _____ of Sulfur Dioxide is dangerous to life
- a. 0.04% to 0.05%
 - b. 1 ppm to 10 ppm
 - c. 2% to 5.5%
 - d. 4 ppm to 6 ppm
10. An increase in temperature and pressure will cause a gas to expand:
- a. True
 - b. False
11. Radon is mostly found in gold, silver, or copper mines
- a. True
 - b. False
12. _____ is the reventilation of the entire sealed area at once.
- a. building bulkheads
 - b. direct ventilation
 - c. progressive ventilation
 - d. not of the above
13. Exhaust fans are used mostly in mines having little overburden.
- a. True
 - b. False
14. Natural ventilation is widely used in mines.
- a. True
 - b. False

15. There are _____ important factors that help determine where to establish a fresh air base.
- a. two
 - b. three
 - c. four
 - d. none of the above
16. Dry chemical fire extinguishers put out fires by stopping the _____ between the fuel and the oxygen
- a. heat reaction
 - b. flame reaction
 - c. chemical reaction
 - d. none of the above
17. When operating a hand-held extinguisher, you should stay high and try to get within 6 to 8 feet of the fire before turning on the fire extinguisher
- a. True
 - b. False
18. Gas Readings should be taken:
- a. at all intersections
 - b. on the other side of bulkheads or doors prior to traveling through
 - c. at the furthest point of travel in any passageway
 - d. all of the above
19. When directly fighting a fire the team should always approach the fire from the intake side:
- a. True
 - b. False
20. Air locking into a seal should never be undertaken until the oxygen content of the air behind the seal has been reduced to at least _____percent
- a. 2
 - b. 2.5
 - c. 3
 - d. 5.5
21. The mine clerk should provide materials for additional telephone communications as needed.
- a. True
 - b. False

22. The mine supervisor should:
- a. provide suitable transportation for people and supplies, as needed
 - b. record the equipment issued and returned
 - c. give each person going underground a check number
 - d. all of the above
23. A 30-pound fire extinguisher will normally last 15 to 25 seconds
- a. True
 - b. False
24. One of the duties of the chief engineer is to prepare an inventory of existing equipment and supplies:
- a. True
 - b. False
25. In accordance with the freedom of information act, news reporters should not be restricted from wandering about the mine property:
- a. True
 - b. False
26. The human body is what percent fluid:
- a. 75
 - b. 80
 - c. 85
 - d. 90
27. The speed or rate at which you will travel underground is usually determined by the:
- a. command center
 - b. fresh air base
 - c. team captain
 - d. size of the mine
28. _____ provides the fresh air base and the command center with a visual record of what is happening underground:
- a. a MINER approved linkline
 - b. briefing session
 - c. simultaneous mapping
 - d. the mine phone

29. A positive indicator that a fire exists in a mine is:
- a. methane and carbon dioxide in the exhaust airway
 - b. carbon monoxide and/or smoke in the exhaust air way
 - c. lowered oxygen content in the exhaust
 - d. a disruption in normal ventilation
30. Before going into a mine to explore for, or to fight a fire, the team should:
- a. ensure gas tests are being done at the exhaust
 - b. make sure the fan is guarded and monitored
 - c. make sure the main fan is running
 - d. all of the above