

Southern Regional Mine Rescue Contest
New Iberia, LA
May 5-7, 2015
Written Test – Field Competition

1. During preparation for opening a sealed fire area, teams should adjust ventilation so toxic and/or explosive gases released from the sealed area are directed into the main exhaust.
 - a. True (Modules 7-19)
 - b. False
2. Direct ventilation is quick and this method can be used even if there is not conclusive evidence that the fire is out as long as the command center approves.
 - a. True
 - b. false (Modules 7-11)
3. The advantage to direct ventilation is that gas conditions can be carefully controlled, and the operation can be halted at any point where conditions seem hazardous.
 - a. True
 - b. False (Modules 7-11)
4. Re-ventilation after an explosion in a multi-level, room-and-pillar mine is usually accomplished by progressive ventilation.
 - a. True
 - b. False (Modules 7-10)
5. The objective of reestablishing ventilation after an explosion is to rid the mine of explosive or potentially explosive gas mixtures and restore normal ventilation and normal amounts of oxygen to all workings without propagating another explosion.
 - a. True (Modules 7-10)
 - b. False
6. Methane can be liberated when water is removed from the mine.
 - a. True (Modules 2-65)
 - b. False
7. In a mine Sulfur Dioxide seeks high places and can burn and explode.
 - a. True
 - b. False (Modules 2-63)
8. Exposure to .10 to .20% or more of Hydrogen Sulfide can cause rapid death.
 - a. True (Modules 2-61)
 - b. False
9. Hydrogen has an explosive range of 4.0 to 74.2% in air with as little as ___% oxygen.
 - a. 10%
 - b. 15%
 - c. 5% (Modules 2-59)
 - d. None of the above
10. The specific gravity for Nitrogen Dioxide is:
 - a. 1.8954
 - b. 1.8459
 - c. 1.5984
 - d. 1.5894 (Modules 2-57)
11. If the sealed area is extensive, it's advisable that a rescue team wearing apparatus be the first to reenter.
 - a. True (Modules 7-10)
 - b. False

12. The distance between air locks is usually between ____ and ____ feet.
 - a. 200 and 500
 - b. 150 and 550
 - c. 100 and 500 (Modules 7-8)
 - d. None of the above
13. A step-by-step plan for unsealing a fire area is drawn up by _____ with the advice of Federal and, where applicable, state, and union representatives.
 - a. Fresh Air Base
 - b. Team Captain
 - c. MSHA Officials
 - d. Company Mine Officials (Modules 7-8)
14. Reestablishing ventilation and bringing fresh air to an area damaged by fire or explosion is the main task of mine rescue teams in an exploration operation.
 - a. True
 - b. False (Modules 7-4)
15. The progressive stiffening of the muscles that occurs several hours after death as a result of the coagulation of the muscle protein is also referred to as putrefaction.
 - a. True
 - b. False (Modules 6-14)
16. Most of the time the body will remain under the water for the first 2 days and then it will float.
 - a. True (Modules 6-10)
 - b. False
17. If a body is in cold water, it will remain in almost perfect condition for 3 or 4 days.
 - a. True
 - b. False (Modules 6-10)
18. The body is ____ percent liquid.
 - a. 90%
 - b. 85%
 - c. 80% (Modules 6-9)
 - d. 75%
19. When a team locates a body, the usual procedure is to report the location to the command center.
 - a. True (Modules 6-8)
 - b. False
20. If a survivor is able to walk, he or she should be positioned in front of the captain and guided out to fresh air.
 - a. True
 - b. False (Modules 6-7)
21. Carbon Monoxide is extremely toxic only in high concentrations.
 - a. True
 - b. False (Modules 2-55)
22. In high concentrations, Carbon Dioxide increases breathing rate and can cause death.
 - a. True (Modules 2-53)
 - b. False
23. The explosive range for Acetylene is:
 - a. 2.0 to 80%
 - b. 2.5 to 85%
 - c. 2.0 to 80% (Modules 2-28)
 - d. None of the above

24. _____ is actually a mixture of carbon dioxide, nitrogen, and air.
- Afterdamp
 - Firedamp
 - Blackdamp (Modules 2-27)
 - Whitedamp
25. Rock gas is largely nitrogen and carbon dioxide.
- True (Modules 2-26)
 - False
26. If a survivor shows no signs of hysteria he or she can be left alone but only for short periods of time.
- True
 - False (Modules 6-7)
27. If you locate a survivor who is acting irrationally, it may be necessary to restrain him or her in order to protect the person from injury.
- True (Modules 6-7)
 - False
28. It is recommended that an emergency medical technician (EMT) be a member of the command center since he or she has the training to determine the extent of injuries, especially if there are several individuals injured.
- True
 - False (Modules 6-6)
29. An example of a low or third priority condition is first degree burns of less than 20% of the body (not including face, hands, or feet).
- True (Modules 6-6)
 - False
30. The sorting of victims is commonly referred to as “triangle” system.
- True
 - False (Modules 6-5)