

2010 National Metal and Nonmetal Mine Rescue Contest

Team Trainer Competition Written Test

Directions

- 1. Find the correct answer to each of the questions.**
- 2. Select only one answer per question.**
- 3. Then, fill in the corresponding circle on the answer sheet for each numbered question.**

Good Luck!



*July 27, 2010
Reno, Nevada*

2010 Metal/Nonmetal National Mine Rescue Contest

Team Trainer Competition – Written Test

Please do not write on this test. Use the answer sheet provided.

1. Every operator of a Metal/Nonmetal mine shall assure the availability of mine rescue capability for purposes of emergency rescue and recovery?
 - a. True
 - b. False
2. Small amounts of trace gases may be contained in air. The trace gases may include?
 - a. Argon
 - b. Neon
 - c. Krypton
 - d. Any of the above
3. All applications for 'Alternative Mine Rescue Capability for Small and Remote Mines' must be approved by?
 - a. The District Manager
 - b. The Coal or MNM Administrator
 - c. The Assistant Secretary of Labor for MSHA
 - d. All of the above
4. Bare-faced exploration should stop at any point where gas tests indicate the presence of any gases?
 - a. True
 - b. False
5. The Miner Act provides liability limits (protection) for individuals involved in mine accident rescue or recovery operations?
 - a. True
 - b. False
6. A hernia, perforated eardrum, or heart disease?
 - a. Disqualifies a miner for mine rescue duties
 - b. Must be considered by the examining physician
 - c. Are not mentioned in 30 CFR, Part 49
7. An anemometer is used to measure air velocities of over 100 feet per minute?
 - a. True
 - b. False
8. Each underground mine shall have a mine rescue notification plan outlining the procedures to follow in notifying the mine rescue teams when there is an emergency that requires their services?
 - a. True
 - b. False

9. Which of the following types of MSHA enforcement actions allow persons to correct hazardous conditions in the affected area without prior approval from an Authorized Representative?
- 103(j) order
 - 103(k) order
 - 107(a) order
 - None of the above
10. Dry chemical fire extinguishers are used to extinguish a fire by?
- Removing one element of the 'Fire Triangle'
 - Stopping the chemical reaction between the fuel and the oxygen
 - Inhibiting the oxidation of the fuel
 - All of the above
11. All mine rescue contest written tests?
- Will be graded by two qualified judges
 - Will be graded using a Scantron test scoring machine
 - Will be given orally in special circumstances
 - All of the above
12. Survivors can be categorized into three priority groups according to their condition or injuries. Multiple lacerations or multiple fractures place a survivor in the second priority?
- True
 - False
13. A mine may be considered for 'Alternative Mine Rescue Capability for Special Mining Conditions' only where the total underground employment of the operator's mine and any surrounding mines is less than 36?
- True
 - False
14. In the 2010 MNM National Mine Rescue Contest Rules, the Hoist Signal for "Hoist Slowly with Caution" is?
- 2-1-2 Bells
 - 3 Bells
 - 3-3-1 Bells
 - None of the above
15. Authorized Representatives of the Secretary shall have the right of entry to inspect any designated mine rescue station located on mine property?
- True
 - False
16. According to 30 CFR, Part 49, a mine rescue team shall consist of?
- Five members and one alternate
 - Five members, one fresh air base attendant, and one assistant (optional)
 - Either a) or b)
 - None of the above

17. First aid contest judges must keep an accurate time and record it on scoring sheets for tie breaker purposes. Station times and total times will be used as first tie breaker, second tie breaker, and third tie breaker?
- True
 - False
18. Class A fires are those that leave Ashes. Class B fires involve contents that will **Burn**?
- True
 - False
19. According to the 2010 Metal and Nonmetal National Mine Rescue Rules a 'Multi-Gas Instrument' must be capable of measuring the concentration of at least two toxic gases?
- True
 - False
20. A gas that will burn is said to be?
- Combustible
 - Flammable
 - Explosive
 - None of the above
21. Where mine rescue capability is required at a mine, it must be provided?
- Before excavation has extended 1000 feet from the openings
 - Within 12 months of initial excavation
 - Whichever comes first, a) or b)
 - None of the above
22. Acetylene may not be a problem for all mines? However, it is?
- Non-combustible
 - Non-toxic
 - Odorless
 - None of the above
23. During the Technician Team contest, unplanned deficiencies caused by one of the team members will result in the clock being stopped?
- True
 - False
24. Blackdamp gets its name from the fact that this mixture caused miners to black out?
- True
 - False
25. For the purposes of contest work, no barricade will be entered without ventilating in front of the barricade if sulfur dioxide exceeds 20 ppm?
- True
 - False

26. What air velocity is required to get 9,000 cubic feet per minute in an air course that measures 15 feet wide by 8 feet high by 2000 feet long?
- a. 75 feet per minute
 - b. 100 feet per minute
 - c. 750 feet per minute
 - d. None of the above
27. As a mine rescue team advances underground, the captain always takes the lead. This is mandated by both State and Federal laws?
- a. True
 - b. False
28. First aid contest discounts will not be added to the team score except?
- a. When there is an administrative error
 - b. When there has been a misapplication of a rule
 - c. The judges have not yet reviewed the discounts sheet with the team
 - d. Any of the above
29. There are three basic methods that can be used for unsealing a fire area, including stage ventilation, progressive ventilation, and direct ventilation?
- a. True
 - b. False
30. The requirement that mine rescue teams be available shall not apply when?
- a. Teams are participating in mine rescue contests
 - b. Teams are providing services to another mine
 - c. Either of the above
 - d. None of the above