

Team Trainer Test w/Answers

2015 Northern Nevada Regional Contest
Winnemucca, Nevada
March 11 & 12, 2015

Please mark the most appropriate answer on the **answer sheet**. **DO NOT mark on the test as it will not be graded.** You will have **60** minutes to complete all testing. Good luck!

1. You cannot under any circumstances, substitute the assistant for a team member that is physically unable to continue working a mine rescue contest problem.
 - a. True
 - b. False **(rule change first seen on Page 8 of the 2015 Mine Rescue Contest Rules)**

2. When roof supports are being set, the first support is set a maximum of ___ from the area designated as unsafe.
 - a. 5 feet
 - b. It isn't spelled out in the rules
 - c. 1 foot **(rule change first seen on Page 29 of the 2015 Rules)**
 - d. 2 feet

3. During the gas field testing Nitrogen Dioxide (NO₂) are considered correct if within___.
 - a. +/- 5 ppm of the actual value present
 - b. +/- 3 percent of the actual value present
 - c. +/- 5 percent of the actual value present
 - d. +/- 3 ppm of the actual value present **(page 34 of the 2015 Rules)**

4. During the Technician Team Competition, your team can receive 10 discount points for not making sure the communication system has been checked and/or repaired.
 - a. True
 - b. False **(The communication reel has been removed in the 2015 Rules)**

5. 30 CFR Part 49 contains many different requirements for mine rescue and mine rescue teams. 30 CFR 49.9 is one of them. What does 49.9 pertain to?
 - a. Mine Rescue Team Member Physical Requirements
 - b. Alternative compliance for special mining conditions
 - c. Mine rescue training
 - d. The mine emergency notification plan **(49.9(a)&(b))**

6. 30 CFR 49.11 pertains to:
 - a. The mine emergency notification plan
 - b. Physical requirements for mine rescue team members
 - c. Mine rescue training
 - d. It's not a standard that I have to know to take this test **(It's a coal standard)**

7. The experience and initial training requirements are waived for persons that were miners on a mine rescue team on the date of the effective rule (Part 49).
 - a. True **(Effective date was July 11, 1980 & it's true)**
 - b. False

8. Module 6 of MSHA Publication 3027 is about Mine Recovery.
 - a. True
 - b. False **(Chapter 6 covers Rescue & Recovery)**

9. Section 7(3) of the MINER Act of 2006 requires that during accidents that the Command Center will serve as the primary communicator with the operator, miners' families, the press and the public.
 - a. True
 - b. False **(Page 1-5 3027, MSHA)**

10. A fictitious gas with a relative weight of 1.001 would be _____ than air.
 - a. lighter
 - b. the same weight
 - c. heavier **(2-6)**

11. According to MSHA Publication 3027, two things that mine rescue teams must be able to test for are:
 - a. Methane & Carbon Monoxide
 - b. Oxygen deficiency and Carbon Monoxide **(Page 2-12)**
 - c. Methane & Oxygen deficiency
 - d. Hydrogen & Carbon Monoxide

12. Oxygen has the same relative weight as air.
 - a. True
 - b. False **(Oxygen's relative weight is 1.1054, making it heavier (page 2-18))**

13. The chemical name of N_2O_4 is:
 - a. Nitric Acid
 - b. Dinitrogen Oxilene
 - c. Nitrogen Dioxide **(Note page 2-17)**
 - d. Nitric Oxide

14. Of the following 3 heavy hydrocarbons, which one has the highest relative weight?
 - a. Propane
 - b. Butane **(2.0100, page 2-23)**
 - c. Ethane

15. When training your team(s) it's important to cover conveyor fires as the decomposition of _____ creates toxic gas
 - a. Belt clips
 - b. The fibrous cords inside

- c. Neoprene **(Page 2-26 Trainer note)**
 - d. None of the above
16. The “visuals” for each module are typically found:
- a. In appendix A
 - b. In the back of the book
 - c. In the glossary
 - d. At the end of each module **(See any module)**
17. Required course materials for teaching the module on Mine Ventilation include:
- a. An anemometer
 - b. Smoke tubes
 - c. A chalk board and/or flip chart
 - d. None of the above **(page 3-1, these items are suggested, not required)**
18. Smoke tubes are used to determine slow moving air velocity below _____.
- a. 130 feet per minute
 - b. 150 feet per minute
 - c. 140 feet per minute
 - d. 120 feet per minute **(page 3-18)**
19. When using a smoke tube a correction must be made to the averaged figure. The way to do this is to:
- a. either multiply the averaged figure by 0.09 and subtract this number from the averaged figure, or multiply the averaged figure by 0.08.
 - b. either multiply the averaged figure by 0.10 and subtract this number from the averaged figure, or multiply the averaged figure by 0.9. **(page 3-19)**
 - c. Apply the calculation - Quantity (ft.³/min.) = Area (ft.²) x Velocity (ft./min.)
 - d. None of the above
20. There are a number of definitions found in MSHA Publication 3027. Where are the majority of these definitions found?
- a. Glossaries **(see glossaries at the end of each module)**
 - b. Table of Contents
 - c. Course Objectives
 - d. None of the above
21. All of the following are terms used for the stages of death and dying EXCEPT:
- a. Denial
 - b. Anger
 - c. Bargaining
 - d. Refusal

22. The ____ cavity is also known as the thoracic cavity:
- Pelvic
 - Chest
 - Abdominal
 - Cranial
23. Positional asphyxia refers to:
- A patient who is restrained in a position that blocks blood flow to the limbs
 - A patient who is restrained in a position that does not allow full expansion of the lungs
 - A patient who is restrained by law enforcement personnel
 - A patient who's restraints restrict movement of the pelvis
24. Which of the following terms best defines oxygen concentration?
- Available amount of air to the patient
 - Amount of oxygen remaining in one exhalation
 - Ratio between oxygen and carbon dioxide
 - Concentration of oxygen available in the patient
25. During two rescuer CPR perform all of the following EXCEPT:
- Provide one breath every five to six seconds of 12 to 15 breaths per minute
 - Deliver 30 compressions at a rate of at least 100 per minute
 - After two minutes or five cycles of 30 compression and two ventilations, switch positions
 - Compressor will count out loud so that both rescuers will maintain the correct rate
26. AED's recognize abnormal heart rhythms and defibrillation may help some patients; however, where there is no electrical activity within the heart, called asystole or "flat line," AEDs will not be effective.
- True
 - False
27. The most important component of Patient Assessment is:
- Primary assessment
 - Secondary assessment
 - History and physical exam
 - Scene size-up
28. The dorsalis pedis pulse is found:
- In the upper torso near the scapula
 - In the sub clavicular space
 - On the top of the foot
 - Near the radial or wrist

29. Patients experiencing cardiac arrest present with the following signs and symptoms:

- a. Rapid pulse rate
- b. Shortness of breath
- c. Pedal edema
- d. All of the above

30. An open pneumothorax can be caused by:

- a. Improper bandage placement
- b. Poor lifting technique
- c. Penetrating objects
- d. Tracheal deviation