

New Iberia
Team trainer Test
2010

1. Module 4 of the Metal Non Metal revised 2008 edition of “A guide to Mine Rescue Training” is
 - a. Mine gases
 - b. Mine ventilation
 - c. Exploration
 - d. Mine Recovery
 - e. None of the above
2. Module 5 in the guide to mine rescue training discusses
 - a. Mine recovery
 - b. Rescue of survivors
 - c. Fires
 - d. Mine ventilation
 - e. None of the above
3. 30 CFR, part 49.1 discusses
 - a. Availability of mine rescue teams
 - b. Alternative mine rescue capabilities for small mines
 - c. Purpose and scope
 - d. Definitions
4. 30 CFR, part 49, subpart B is for Metal Non Metal teams
 - a. True
 - b. False
5. 30 CFR, 49.3 an operator can apply for small and remote status if there are fewer than _____ underground employees within two hours of ground travel time,
 - a. 25
 - b. 35
 - c. 26
 - d. 36
 - e. 15

6. 49.7 under physical requirements for mine rescue team members a team member must have a repeated blood pressure reading that does not exceed
- a. 150 over 100
 - b. 160 over 120
 - c. 160 over 100
 - d. 150 over 90
 - e. None of the above
7. Mine rescue equipment repair records shall be kept for
- a. 1 year
 - b. 2 year
 - c. No requirement
 - d. Until reviewed by an Authorized representative from MSHA
8. Which of the following is not true of sulfur dioxide?
- a. It is explosive
 - b. It is highly toxic
 - c. It is highly soluble in water
 - d. It can occur during mine fires
9. An elevated concentration of carbon dioxide in mine air can be harmful because;
- a. It is highly explosive
 - b. It increases the breathing rate
 - c. It is highly toxic in small concentrations
 - d. All of the above
10. Characteristics of hydrogen sulfide include:
- a. Explosive
 - b. High toxic
 - c. Can be liberated from pools of stagnant water
 - d. All of the above
11. 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
 - d. Cannot be detected with today's detection instruments
12. Carbon dioxide (CO₂) seeks high places
- a. True
 - b. False

13. Nitrogen Dioxide (NO₂) seeks high places
- a. True
 - b. False
14. Hydrogen (H₂) seeks high places
- a. True
 - b. False
15. Sulfur Dioxide (SO₂) has a specific gravity of 2.2638, therefore should be tested for in low areas. It has a very low explosive range and is very toxic.
- a. True
 - b. False
16. Infectious diseases range from such generally mild conditions as the common cold to life-threatening diseases such as tuberculosis. The four diseases of most concern to emergency medical responders are:
- a. Human immunodeficiency virus, hepatitis, tuberculosis, meningitis.
 - b. AIDS, hepatitis, blood borne pathogen, influenza
 - c. Typhoid fever, viral encephalitis, bacterial meningitis, SARS
 - d. Hepatitis, tuberculosis, meningitis, Lyme disease
17. The appropriate rate of compressions during adult CPR is ____per minute.
- a. 80 to 100
 - b. No faster then 80
 - c. About 100
 - d. No faster then 120
18. Pulmonary resuscitation is:
- a. Any effort to restart normal heart rhythms.
 - b. Any effort to revive or restore normal breathing.
 - c. The use of mechanical devices to restart breathing.
 - d. The ability to restore normal heart rhythm and breathing.
19. Mine rescue teams should alter existing ventilation:
- a. Only when directed to do so by the command center
 - b. When the team captain decides to do so
 - c. When they encounter high concentrations of carbon monoxide
 - d. When they encounter smoke

20. Burning materials that give off extremely toxic gases in addition to carbon monoxide:
- a. Timbers
 - b. Hydraulic fluids
 - c. Neoprene and other synthetic rubber compounds
 - d. All of the above
21. Barefaced exploration should be attempted only when:
- a. The team captain says it OK
 - b. Everyone on the team says there up for it
 - c. A back up mine rescue team with apparatus is immediately available
 - d. There are no indications an apparatus is needed.
22. In the Code of federal regulations 49.2 "Availability of mine rescue teams" clearly outlines the requirements of a mine rescue team except teams operating under 49.3 or 49.4
- a. True
 - b. False
23. It is much easier to remove a concentration of sulfur dioxide by ventilation than it is to remove the same concentration of hydrogen
- a. True
 - b. False
24. Which of the following is not a heavy hydrocarbon?
- a. Ethane
 - b. Propane
 - c. Butane
 - d. Acetylene
25. Sulfur Dioxide gas in concentrations as low as _____ is dangerous to life.
- a. .02 to .07 %
 - b. .01 to .05 %
 - c. .04 to .05 %
 - d. .4 to .5 %
 - e. .004 to .005 %

26. If you took a ventilation reading in a drift 14 feet wide and 16 feet high and record a true reading of 1200 fpm, what is the CFM?
- a. 2400
 - b. 250,00
 - c. 268,000
 - d. 286,800
27. Taking a reading in a drift 10 feet wide and 10 feet high and a true reading of 1000 feet per minute the CFM would be.
- a. 1000
 - b. 10,000
 - c. 100,000
 - d. None of the above
28. If a survivor is found in contaminated or questionable air and is fully conscious and ready to travel, the team should
- a. Get them to a fresh air base as soon as possible
 - b. Let them continue to head for a fresh air base so the team can do more important work
 - c. Provide the person with breathing protection and send them toward fresh air.
 - d. None of the above
29. In body recovery, a muscular individual will begin putrefaction sooner than an obese person.
- a. True
 - b. False
30. If a body is found the first thing a team member should do is check all of his/her pockets and look for stuff that will identify him/her.
- a. True
 - b. False
31. The fact that Nitrogen Dioxide (NO₂) is non toxic when encountered by a team they should map and mark it but move on and worry about more dangerous gases.
- a. True
 - b. False

32. When measuring ventilation with a smoke tube one must convert FPS to FPM. Therefore 23 seconds

60 seconds= _____

- a. .28 minute
 - b. **.38 minute**
 - c. .48 minute
 - d. none of the above
33. Medium velocity anemometer is used to determine air velocities from _____ to _____ fpm.
- a. 100/1000
 - b. 120/1200
 - c. **120/2000**
 - d. 1000/3000
34. Team signals of one= stop, two signals= advance, three signals= retreat, four signals= distress are international signals all team members know and use.
- a. True
 - b. **False**
35. The best way to prevent hydrogen pops during a fire fighting event is to
- a. Build a fire regulator
 - b. Decrease air flow
 - c. **Provide adequate air flow over the fire**
 - d. None of the above