BOARD OF FIREFIGHTING PERSONNEL
STANDARDS AND EDUCATION

Hazardous Material Technician Sample Test

7/10/15
Version 0

Hazmat Technician
1. A halogenated hydrocarbon may contain the following elements: carbon, hydrogen, and ________.
   A. chlorine.
   B. bromine.
   C. fluorine.
   D. all of the above are correct.

2. Technicians who travel down range to gather information are called the:
   A. reconnaissance entry team.
   B. information team.
   C. decontamination team.
   D. resource team.

3. An intermodel tank car consists of seamless steel cylinders from nine (9) to 48 inches with fittings at one end is a _____ car.
   A. nonpressurized tank
   B. flammable liquid tank
   C. tube module
   D. low-pressure tank

4. Which of the following equipment is not normally part of a sample collection kit?
   A. Bung wrench
   B. paper cup
   C. coliwa
   D. nonsparking sample pole

5. Given an incident involving anhydrous ammonia, the decontamination of crew members through the use of water and soap is known as:
   A. dilution.
   B. adsorption.
   C. absorption.
   D. neutralization.

6. Operating filaments of the Combustible Gas Indicator (CGI) can be damaged by brief exposure to:
   A. unleaded gasoline.                           B. methyl ethyl ketone.
   C. organic silicone.                            D. kerosene.

7. When selecting a proper patching device, choose one that is compatible with the material you are attempting to control, and ensure it is a minimum of ________ times larger than the estimated opening.
   A. 1.5
   B. 2
   C. 1.75
   D. 2.5
8. All of the following are required on a pipeline marker except:
   A. product.
   B. product separator material.
   C. owner/operator.
   D. emergency telephone number.

9. Where would you find valves on a one-ton container?
   A. end
   B. top
   C. bottom
   D. middle

10. ________ refers to the process of moving liquids, gases, or solids, either manually, by pump, or pressure transfer, from a leaking or damaged container.
    A. Mitigation
    B. Containment
    C. Confinement
    D. Product transfer

11. A reading of "0" on any direct reading sampling device should be reported as:
    A. zero reading.
    B. clean-area response.
    C. batteries need to be checked.
    D. no instrument response.

12. Which of the following would you not expect in a one-ton container?
    A. Chlorine
    B. Oxygen
    C. Sulfur dioxide
    D. Phosgene

13. T F Vent and burn is the last option at a HAZMAT scene.

14. The amount of one substance mixed or dissolved in a specified amount of a second substance, usually measured in percentage, is known as the:
    A. concentration.
    B. miscible.
    C. compound.
    D. mixture.

15. The appropriate device to be used in detecting nerve agents is a(n):
    A. M8 detection paper.
    B. mercury detector.
    C. fluoroscope.
    D. both A and B are correct

16. The individual responsible for establishing and managing the site plan, developing an organizational structure, and allocating resources best describes the:
    A. Safety Officer.
    B. Incident Commander.
    C. Operations Officer.
    D. Decontamination Officer.
17. The process in which a leaking compressed gas cylinder of chlorine is placed inside another cylinder device to control a leak is known as:
   A. packing.
   B. vacuuming.
   C. patching.
   D. overpacking.

18. Which of the following exposure values could be repeated during an 8-hour work day a maximum of four times daily for 15 minutes with a 60-minute rest period between exposures?
   A. IDLH
   B. TLV-TWA
   C. TLV-STEL
   D. TLV-C

19. The illustration and description below would be identified as a(n):

   ![Illustration of a tank trailer]

   **Description:** Service pressures range from 100 to 500 psi.

   A. IMO Type 1.  
   B. IMO Type 2.  
   C. IMO Type 5.  
   D. IMO Type 7.

20. Which of the following products will likely be carried in a type MC 331 tank trailers?
   A. anhydrous ammonia
   B. propane
   C. gasoline
   D. both A and B are correct

21. When using air purifying respirators, which of the following is not an operational component that should be considered prior to use?
   A. The supplied air line cannot exceed 300 feet.
   B. The appropriate cartridge/filter is selected prior to use.
   C. The concentration of the chemical is known.
   D. Ambient air must contain at least 19.5% oxygen.
22. Glass devices filled with a reagent, designed to measure specific concentrations of products by producing a measurable stain best describes:
   A. colorimetric tubes.              B. combustible gas indicators.
   C. gas chromatography.              D. photoionization detectors.

23. A tank car has the specification DOT 112 T 400 W. What does the T stand for?
   A. Thermal protection system
   B. Thermal & insulation protection systems
   C. Thermal protection system and a head shield
   D. Head shield and shelf couplers

24. A recon team is sent to observe a tank truck that has rolled over. The team reports that the vehicle is an MC 312. The container most probably contains a:
   A. flammable liquid.
   B. corrosive liquid.
   C. poison gas.
   D. flammable solid.

25. There is no assurance that once decontamination of chemical protective clothing is complete, ________ has ceased.
   A. chemical metabolism
   B. abrasion
   C. permeation
   D. penetration