

NFPA Hazardous Materials Operations

| <b>STANDARDS &amp; ACCREDITATION</b> |  |                     |                     |
|--------------------------------------|--|---------------------|---------------------|
| <b>Exam Name</b>                     | NFPA Hazardous Materials Operations  |                     |                     |
| <b>NFPA Standard</b>                 | 472  | <b>Edition</b>      | 2013                |
| <b>Chapter</b>                       | 5  | <b>Next Edition</b> | *2018               |
| <b>IFSAC Accredited</b>              | Accredited   | <b>Test Purpose</b> | Evaluate competency |
| <b>Prerequisite Certifications</b>   | See Policy and Procedure Manual, Section 17.5.2<br>Hazardous Materials Awareness |                     |                     |

| <b>WRITTEN EXAM INFORMATION</b>   |                                    |                                   |             |
|-----------------------------------|------------------------------------|-----------------------------------|-------------|
| <b>Questions Per Test</b>         | 100                                | <b>Time Allowed</b>               | 120 minutes |
| <b>Minimum Score</b>              | 70%                                | <b>Graded By</b>                  | NSFM Staff  |
| <b>Test Developed By</b>          | Performance Training Systems, Inc. | <b>Last Update</b>                | 2014        |
| <b>Type of Questions</b>          | Multiple choice                    | <b># of Questions in the Bank</b> | 277         |
| <b>Student Required Materials</b> | Number 2 Pencil                    |                                   |             |

| <b>SKILLS EXAM INFORMATION</b> |   |                           |     |
|--------------------------------|---|---------------------------|-----|
| <b># of Skills in Bank</b>     | 18  | <b># of Skills Tested</b> | 6   |
| <b># of Phase I Skills</b>     | N/A   | <b># of Skills Tested</b> | N/A |
| <b>Grading Criteria</b>        | Pass/Fail as outlined on individual skill sheet |                           |     |
| <b>Required Materials</b>      | AHJ PPE   |                           |     |
| <b>Selected Skills</b>         | SCBA Donning will always be tested              |                           |     |

| <b>SPECIAL INFORMATION</b>      |  |
|---------------------------------|--|
| <b>Retest Policy</b>            | Please reference the Policy and Procedure Manual |
| <b># of Proctors (written)</b>  | 1 proctor per 30 students                        |
| <b># of Evaluators (skills)</b> | 1 evaluator per every 5 candidates               |

\* Edition tentative per NFPA

Attached, please find some sample written examination questions.

Name: \_\_\_\_\_

20q

NFPA Sample HM OPS

Form: 1

Version: 0

1. When a fire involves the cargo of a truck transporting explosives, the responders should:
  - A. increase water application immediately.
  - B. try to separate unburned cargo.
  - C. attempt to move the involved vehicle to a safer location.
  - D. immediately evacuate the area.
  
2. \_\_\_\_\_ is designed to remove contaminants that pose immediate threat to life.
  - A. Emergency decontamination
  - B. Secondary decontamination
  - C. Decontamination
  - D. Primary decontamination
  
3. The CHEMTREC organization is available \_\_\_\_\_ hours per day to provide information about \_\_\_\_\_ to \_\_\_\_\_.
  - A. 24, certain chemicals, transport personnel only
  - B. 24, many chemicals, response agencies
  - C. during normal business, only liquid chemicals, any emergency agency
  - D. during normal business, selected chemicals, any interested person
  
4. The complexity of transport regulations is compounded by several agencies having overlapping responsibilities. All of the following federal agencies are involved in the regulation of hazardous materials and/or wastes **except** the:
  - A. Department of Transportation (DOT).
  - B. Department of Energy (DOE).
  - C. Transport Development Group (TDG).
  - D. Chemical Transportation Emergency Center (CHEMTREC)
  
5. When responding to a potential hazardous material incident, the safest way to approach the scene is to:
  - A. take the most direct route to the scene.
  - B. approach from downwind as this will allow you to detect any odors from a greater distance from the scene.
  - C. approach from uphill and upwind even if it requires a longer response time.
  - D. stage the vehicles downhill and upwind until the Haz mat team arrives.
  
6. You have arrived on the scene of a hazardous materials incident involving pesticides. On one of the pesticide labels, you notice the statement "Keep from waterways." This statement is called the:
  - A. Signal Words.
  - B. EPA Statement.
  - C. Hazard Statement.
  - D. Danger Statement.

7. The eight-step process recommended for assessing a hazardous materials incident includes:
- A. hazard and risk evaluation.
  - B. implementing response objectives.
  - C. sniffing for odors, and tasting the material.
  - D. Both A & B are correct.
8. If a numbered guide for a transported hazardous material cannot be obtained by following the three steps outlined on page 1 of the DOT Emergency Response Guidebook, the first responder should:
- A. call CHEMTREC immediately.
  - B. contact the carrier of the chemical.
  - C. see if the placard is visible, refer to the Table of Placards section of the Guidebook.
  - D. assume the material may undergo violent polymerization if subjected to heat or contamination.
9. Which of the following correctly identifies the purpose, advantages, and limitations of structural firefighting protective clothing at hazardous materials incidents?
- A. Protection from heat, moisture and ordinary hazards associated with firefighting; provides thermal, impact, and cut/abrasion protection; offers limited chemical protection.
  - B. Protection from heat, moisture and hazards associated with firefighting; can be worn for decontamination activities; is acid but not base resistant.
  - C. Protection from heat and impacts; shields or insulates from chemical hazards; is corrosive resistant but not vapor tight.
  - D. Protection from heat, moisture and impacts; provides long-term protection from extreme weather conditions and unlimited range of motion; is resistant to permeation, but not penetration.
10. The concentration that **should never** be exceeded is called:
- A. TLV-C.
  - B. PEL.
  - C. TLV-TWA.
  - D. STEL.
11. At a hazardous materials incident, which function area is responsible for developing a special technical group to the basic incident command system?
- A. Planning
  - B. Logistics
  - C. Command
  - D. Operations
12. What should responders do with runoff from emergency decontamination?
- A. Flush into a convenient storm drain using copious amounts of water.
  - B. Divert into an area where it can be treated or disposed of later.
  - C. Try to delay decontamination until a decontamination corridor or area is established, which will eliminate the runoff problem.
  - D. Perform the decontamination process in the hot zone so that runoff just becomes part of the original problem.

13. Substances or materials in quantities or forms that may pose an unreasonable risk to health, safety, or property when transported, stored, or used in commerce is a definition for a:
- A. hazard class.
  - B. hazardous chemical.
  - C. hazardous material.
  - D. hazardous substance.
14. Defensive control techniques that operations level personnel are permitted to engage in are:
- A. monitoring and capping.
  - B. dike, dam, diversion, and retention.
  - C. overpacking and diluting.
  - D. clamping and neutralizing.
15. The DOT Hazard Class 6 includes all of the following **except**:
- A. liquid poisons.
  - B. infectious substances.
  - C. poison solids.
  - D. poison gases.
16. **Directions:** Read the following statements regarding limitations of personnel working in PPE and select your answer from choices A-D.
- Statement 1:** A responder's physical, mental, or emotional condition can cause problems with using PPE.
- Statement 2:** Practice and conditioning can help reduce psychological limitations of PPE users.
- Statement 3:** Training and education can help reduce physical limitations of PPE users.
- A. Statement 1 is true; statements 2 and 3 are false.
  - B. Statements 1 and 2 are true; statement 3 is false.
  - C. Statement 1 is false; statements 2 and 3 are true.
  - D. All three statements are true.
17. When dealing with a radiological incident involving a leak or spill, what exposure guidelines should the hazmat first responder use to minimize radioactive contamination?
- A. Time, distance, half-life
  - B. Ionizing radiation, non-ionizing radiation, half-life
  - C. Time, distance, shielding
  - D. Alpha particles, beta particles, gamma rays
18. At a terrorism event, when preserving evidence, it is important to do all of the following **except**:
- A. avoid touching anything unless necessary.
  - B. minimize the number of people working in the area.
  - C. take photographs or video of the scene.
  - D. move evidence to another location.

19. Under fire conditions, indicators preceding a rupture of a compressed gas tank include all of the following **except**:
- A. discoloration of the tank.
  - B. a high-pitched whistle.
  - C. leakage of the hazardous material.
  - D. a change in the position of the tank.
20. Which of the following **is not** a response objective for hazardous material incidents?
- A. Leak control
  - B. Rescue
  - C. Recovery
  - D. Reporting
21. The individual responsible for establishing and managing the overall plan, developing an organizational structure, and allocating resources **best** describes the:
- A. Safety Officer.
  - B. Incident Commander.
  - C. Operations Sections Chief.
  - D. Decontamination Officer.
22. Of the 62 guides found in the orange-bordered section of the Emergency Response Guidebook, only two, Guides 161 and 162 (low level and low to moderate level radiation) list \_\_\_\_\_ as providing adequate protection for first responders.
- A. street clothes or work uniforms
  - B. chemical-protective clothing and equipment
  - C. SCBA and street clothes or work uniforms
  - D. SCBA and structural firefighter's protective clothing
23. Prior to entry into a confined space, defensive actions taken should include:
- A. diking or remote closing a valve.
  - B. pretest all equipment.
  - C. brief all personnel on the incident action plan.
  - D. establish a crew rotation schedule.
24. A process by which one substance combines with a second substance is called:
- A. absorption.
  - B. dispersion.
  - C. suppression.
  - D. diversion.
25. Which of the package labels listed below indicates the highest radiation hazard?
- A. Radioactive White-I
  - B. Radioactive Yellow-II
  - C. Radioactive Yellow-III
  - D. Radioactive Blue-III