

Demo PDF file. This file includes questions: 10 from 247. Full version of file looks the same as demo, but full version includes all questions. You may download file with all questions by link on bottom of this page

Q189 - Deck Safety

1. When is firefighting foam most effective?

- When it is kept saturated with low-velocity water fog
- As it mixes with the burning fuel oil
- **When it completely covers the top of the burning liquid**
- If it penetrates to the bottom of the fire

Note:

Foam extinguishes flammable liquid fires by forming a complete surface layer that excludes oxygen and suppresses vapors; therefore, it is most effective when it fully covers the burning liquid.

2. Which is the MOST important consideration for a tank vessel?

- GM
- The longitudinal center of gravity
- The vertical center of gravity
- **The stress on the hull**

Note:

Maintaining hull girder stress within safe limits is the primary concern for tank vessels, as structural failure is catastrophic even with acceptable stability parameters like GM, LCG, and VCG; therefore, stress on the hull is the most important consideration.

3. Which signaling device(s) is/are required on inflatable liferafts?

- An oil lantern
- A rocket shoulder rifle
- **Hand flares**
- An air horn

Note:

Inflatable liferafts are required to carry hand flares as part of their standard equipment to meet SOLAS and U.S. regulations.

4. Which of the listed classes of fire would most likely occur in the engine room of a vessel?

- Classes "A" and "B"
- **Classes "B" and "C"**
- Classes "C" and "D"
- Classes "A" and "D"

Note:

Engine rooms contain flammable liquids and energized electrical equipment, making Class B and Class C fires the most likely.

5. A magnesium fire is classified as class _____.

- Class A
- Class B
- Class C
- **Class D**

Note:

Magnesium fires are classified as Class D because magnesium is a combustible metal. Class D fires specifically involve combustible metals like magnesium, while Class A covers ordinary combustibles, Class B covers flammable liquids and gases, and Class C covers energized electrical equipment.

6. Which defines the "flammable limits" of an atmosphere?

- The upper and lower pressures between which an atmosphere will not burn
- The two temperatures between which an atmosphere will self-ignite
- The two temperatures between which an atmosphere will burn if an ignition source is present
- **The upper and lower percentage of vapor concentrations in an atmosphere which will burn if an ignition source is present**

Note:

Flammable limits define the range of vapor concentrations in air that will burn with an ignition source.

7. When compared to low-expansion foam, a high-expansion foam will _____.

- be heavier
- **be drier**
- not cling to vertical surfaces
- be more heat resistant

Note:

High-expansion foam contains more air and less water per volume than low-expansion foam, resulting in a drier foam.

8. Which portable fire extinguisher should be used on a class C fire on board a vessel?

- **Carbon dioxide**
- Foam
- Carbon tetrachloride
- Water (stored pressure)

Note:

Carbon dioxide extinguishers are appropriate for Class C fires because they are non-conductive and safe for use on energized electrical equipment. Water, foam, and carbon tetrachloride are unsuitable due to electrical conductivity, toxicity, or obsolescence.

9. Recharging a previously used cartridge-operated dry chemical fire extinguisher is accomplished by _____.

- recharging the cartridge and refilling it with powder
- **replacing the propellant cartridge and refilling it with powder**
- puncturing the cartridge seal after installation
- authorized fire equipment servicing personnel only

Note:

Cartridge-operated dry chemical fire extinguishers are recharged by replacing the propellant cartridge and refilling the cylinder with dry chemical powder.

10. To prevent the spread of fire by convection you should _____.

- **close all openings to the area**
- shut off electrical power
- cool the bulkhead around the fire
- remove combustibles from direct exposure

Note:

Convection spreads fire through the movement of hot gases; therefore, closing all openings to the affected area is the most effective method to prevent its spread.
