
Q437 - Barge Supervisor: Deck General/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.

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2. If you find a victim that is unconscious. What vital signs is an immediate threat to life?

- High fever
- Broken limbs
- **Irregular breathing**
- Head injury

Note:
Irregular breathing poses an immediate life threat because it compromises oxygen supply. Prioritizing airway and breathing is fundamental in first aid, as these are vital signs that can lead to rapid deterioration in an unconscious victim. Other conditions, while serious, do not present the same immediate danger as respiratory failure.

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3. A construction portfolio may be included as part of the MODU _____.

- general plans
- **operating manual**
- builders documentation
- Coast Guard file

Note:
The MODU operating manual serves as the primary onboard document and may incorporate the construction portfolio to provide readily available structural and design information to the crew.

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4. The helicopter deck on an offshore drilling unit is required to be fitted with perimeter lights in alternating colors of _____.

- yellow and red
- yellow and white
- red and white
- **yellow and blue**

Note:
U.S. regulations mandate alternating yellow and blue perimeter lights on offshore drilling unit helicopter decks to provide clear visual guidance for pilots. This requirement is specified in 46 CFR Part 108 and distinguishes the landing area, particularly in low visibility conditions; other color combinations are not compliant.

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5. What class of bulkhead is required around the galley on a MODU?

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

Note:
Class A bulkheads are required around galleys on MODUs due to the galley's designation as a high fire-risk service space. Class A bulkheads provide the necessary fire resistance to contain a fire and protect adjacent areas, exceeding the standards of Class B, C, and D divisions.

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6. On all mobile offshore drilling units, the deckhead of each accommodation space must be located above _____.

- **the deepest load line**
- the operating draft
- the transit draft
- the survival draft

Note:
Regulations require that the deckhead of each accommodation space on mobile offshore drilling units be located above the deepest load line to ensure living spaces remain above the highest permitted waterline in all loading conditions.

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7. Where are self-closing doors required on a MODU?

- **In each stair tower**
- In the galley
- To each sleeping room
- To the engine room

Note:
Self-closing doors are required at stair tower entrances on MODUs to maintain the integrity of escape routes.

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8. 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.

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9. A definite advantage in the use of water as a fire extinguishing agent is its ability to _____.

- alternate expansion and contraction as water in liquid state becomes vapor
- absorb smoke and gases as water is converted from liquid to vapor
- **vaporize and rapidly expand as water absorbs heat**
- rapidly contract as water is converted from a liquid to a vapor

Note:
Water extinguishes fires primarily by absorbing heat and rapidly expanding as steam, which cools the burning material and displaces oxygen.

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10. Which is one of the limitations of foam as an extinguishing agent?

- **Foam conducts electricity**
- Foam is heavier than oil and sinks below its surface
- Foam is corrosive to all steel surfaces and is hazardous to firefighters
- Foam cannot be made with salt water

Note:
Foam, often water-based, conducts electricity, making it unsuitable for use on energized electrical equipment and representing a significant limitation.
