

Advanced Maritime Technology

Maritime Technology · Answer Key · 10 Questions

1. What is the primary function of a bulbous bow on a large commercial vessel?

- A) To increase structural stability in high waves
- B) To create a wave interference pattern that reduces drag**
- C) To act as a housing for active sonar equipment
- D) To break through thin layers of sea ice

2. Which maritime device is used to measure the depth of water beneath a ship's keel using reflected sound pulses?

- A) Sextant
- B) Anemometer
- C) Fathometer**
- D) Gyroscopic compass

3. In shipbuilding, what is the term for the vertical distance between the waterline and the bottom of the hull?

- A) Freeboard
- B) Draft**
- C) Beam
- D) Deadweight

4. Which component of a ship's propulsion system converts rotational energy into thrust?

- A) Rudder
- B) Propeller**
- C) Bulkhead
- D) Ballast tank

5. What is the purpose of a 'sacrificial anode' attached to a ship's hull in saltwater?

- A) To provide extra buoyancy
- B) To detect underwater obstacles
- C) To prevent galvanic corrosion of the steel hull**
- D) To stabilize the vessel's center of gravity

6. What navigational technology uses a network of satellites to determine a vessel's precise position?

- A) Loran-C
- B) GNSS**
- C) Celestial navigation
- D) Dead reckoning

7. Which type of maritime vessel is specifically designed to alter its buoyancy to submerge or surface?

- A) Hydrofoil
- B) Catamaran
- C) Submersible**
- D) Barge

8. What is the function of a 'bulkhead' inside a ship?

- A) To provide propulsion power
- B) To divide the hull into watertight compartments**
- C) To steer the vessel
- D) To house the ship's cargo

9. Which instrument uses a magnetized needle to indicate direction relative to Magnetic North?

- A) Clinometer
- B) Gyrocompass
- C) Magnetic compass**
- D) Sextant

10. What is the purpose of 'ballast water' in a modern cargo ship?

- A) To provide drinking water for the crew
- B) To maintain the ship's trim and stability**
- C) To power the ship's auxiliary engines
- D) To clean the ship's cooling pipes