

Maritime Technology and Our Oceans

Maritime Technology · Answer Key · 15 Questions

1. What maritime technology is specifically designed to study marine life and ocean conditions from beneath the surface?

- A) Satellite imagery
- B) Sonar systems
- C) Autonomous underwater vehicles (AUVs)**
- D) Navigation buoys

2. Which type of maritime vessel is often equipped with advanced sensors to detect whale songs and other marine mammal vocalizations?

- A) Container ship
- B) Research vessel**
- C) Tugboat
- D) Cruise liner

3. How do specially designed ship hulls, known as 'eco-designs', aim to reduce environmental impact?

- A) By increasing fuel consumption
- B) By reducing drag and improving fuel efficiency**
- C) By emitting more exhaust fumes
- D) By creating larger wakes

4. What is a primary environmental concern related to the noise pollution generated by large ships?

- A) It helps marine animals navigate.
- B) It can interfere with marine mammal communication and behavior.**
- C) It purifies the ocean water.
- D) It encourages coral reef growth.

5. Which technology helps monitor the health of coral reefs by providing detailed underwater imagery?

- A) GPS trackers
- B) Remote sensing drones
- C) Submersibles and ROVs (Remotely Operated Vehicles)**
- D) Anchor systems

6. What is the main purpose of 'whale deterrent systems' found on some offshore structures or vessels?

- A) To attract whales for observation
- B) To warn whales of approaching danger or noise**
- C) To measure whale blubber thickness
- D) To collect whale samples

7. How does improved navigation technology, like GPS, contribute to marine conservation?

- A) By making fishing more efficient for overfishing
- B) By allowing ships to avoid sensitive marine habitats**
- C) By increasing the risk of grounding on reefs
- D) By depositing more ballast water

8. What environmental benefit does the development of cleaner marine engine technologies offer?

- A) Increased emissions of greenhouse gases
- B) Reduced air and water pollution from ships**
- C) Higher levels of sulfur dioxide in the atmosphere
- D) More oil spills

9. Which maritime technology is used to map the seabed and identify potential breeding grounds for marine species?

- A) Periscopes
- B) Echo sounders and multibeam sonar**
- C) Lifeboats
- D) Crow's nests

10. What role do 'marine protected area monitoring systems' play in safeguarding marine ecosystems?

- A) They encourage increased fishing within protected zones.
- B) They help enforce regulations and track human activities to protect marine life.**
- C) They are used for recreational boating.
- D) They signal shipping lanes.

11. How can advanced hull coatings on ships help the environment?

- A) By attracting invasive species
- B) By reducing the growth of barnacles and algae, which decreases drag and fuel use**
- C) By releasing toxins into the water
- D) By creating rougher surfaces

12. What type of maritime technology is used to study the migration patterns of large marine animals like turtles or sharks?

- A) Trawling nets
- B) Satellite tagging and tracking devices**
- C) Foghorns
- D) Anchors

13. Which innovation in maritime technology aims to collect plastic waste from the ocean surface?

- A) Ballast water treatment systems
- B) Ocean cleanup systems and booms**
- C) Marine radar
- D) Wreck detection sonar

14. What is the function of 'environmental monitoring buoys' deployed in the ocean?

- A) To signal shipwrecks
- B) To collect data on water quality, temperature, and currents for environmental studies**
- C) To guide fishing fleets
- D) To serve as lighthouses

15. How can the design of ports and harbors incorporate maritime technology to benefit the environment?

- A) By increasing artificial light pollution
- B) By implementing systems to manage stormwater runoff and reduce pollution entering the sea**
- C) By allowing more dredging
- D) By creating artificial reefs for shipwrecks