1. What are the primary components of a harbour?
a) Ships, cranes, and warehouses
b) Piers, docks, and breakwaters
c) Roads, bridges, and railways
d) Lighthouses, buoys, and navigation aids

Answer: b) Piers, docks, and breakwaters
Explanation: Harbours typically consist of piers (where ships can dock), docks (for loading and unloading cargo), and breakwaters (to protect the harbour from waves and currents).

2. Which of the following is NOT a characteristic used to classify ships in harbour planning?
a) Length overall (LOA)
b) Gross tonnage (GT)
c) Draft
d) Cargo value

Answer: d) Cargo value
Explanation: Ships are classified based on their physical dimensions such as length overall (LOA), gross tonnage (GT), and draft, which are important factors considered in harbour planning for accommodating vessels of different sizes.

3. What is a characteristic of a good harbour?
a) Shallow waters
b) Limited space for expansion
c) Good natural protection from waves and winds
d) High traffic congestion

Answer: c) Good natural protection from waves and winds
Explanation: A good harbour typically has natural features like sheltered bays or strategically placed landforms that provide protection from rough seas and strong winds, ensuring safe anchorage for ships.

4. Which principle is NOT considered in harbour planning?
a) Accessibility to transportation networks
b) Environmental sustainability
c) Proximity to residential areas
d) Economic viability

Answer: c) Proximity to residential areas
Explanation: While accessibility to transportation networks, environmental sustainability, and economic viability are important principles in harbour planning, proximity to residential areas may not be desirable due to noise, pollution, and safety concerns.

5. What factor influences the size of a harbour?
a) Number of ships passing through
b) Average cargo volume
c) Length of coastline
d) Geographic location

Answer: b) Average cargo volume
Explanation: The size of a harbour is influenced by the average cargo volume it needs to handle, which determines the required capacity for docks, storage facilities, and transportation infrastructure.

6. Which criterion is important in site selection for a harbour?
a) Proximity to tourist attractions
b) Availability of skilled labor
c) Depth of water
d) Distance from urban centers

Answer: c) Depth of water
Explanation: Site selection for a harbour involves considering factors such as water depth, proximity to shipping routes, ease of access, and land availability, with water depth being crucial for accommodating vessels of various sizes.

7. What is a key aspect of harbour layout?
a) Maximizing pollution
b) Minimizing accessibility
c) Optimizing space utilization
d) Encouraging congestion

Answer: c) Optimizing space utilization
Explanation: Harbour layout aims to optimize the use of available space for docks, storage areas, navigation channels, and infrastructure to facilitate efficient ship operations and cargo handling.

8. Which survey is NOT typically conducted for harbour planning?
a) Environmental impact assessment
b) Traffic flow analysis
c) Market demand study
d) Architectural design review

Answer: d) Architectural design review
Explanation: While architectural design considerations may be part of harbour planning, surveys such as environmental impact assessment, traffic flow analysis, and market demand study are more directly related to understanding the feasibility and requirements of harbour development.

9. What is the primary purpose of a traffic flow analysis in harbour planning?
a) Maximizing congestion
b) Minimizing safety
c) Optimizing vessel movements
d) Encouraging delays

Answer: c) Optimizing vessel movements
Explanation: Traffic flow analysis in harbour planning focuses on optimizing the movement of vessels within the harbour to minimize congestion, ensure safety, and maximize efficiency in cargo handling operations.

10. Which survey helps evaluate the environmental implications of harbour development?
a) Market demand study
b) Socioeconomic impact assessment
c) Environmental impact assessment
d) Archaeological excavation

Answer: c) Environmental impact assessment
Explanation: An environmental impact assessment survey evaluates the potential environmental effects of harbour development, including impacts on ecosystems, water quality, air quality, and biodiversity, helping to inform sustainable planning and mitigation

measures.