1. Which type of canal lining is typically used to minimize seepage losses?
a) Concrete lining
b) Earthen lining
c) Brick lining
d) Composite lining

Answer: a) Concrete lining
Explanation: Concrete lining is commonly used in canals to minimize seepage losses due to its impermeable nature and durability.

2. Kennedy’s silt theory is related to:
a) Canal lining
b) Canal alignment
c) Canal design
d) Canal losses

Answer: d) Canal losses
Explanation: Kennedy’s silt theory provides a method for estimating the sediment transport capacity of a canal, which helps in managing sedimentation and reducing losses.

3. Which theory is used to determine the minimum velocity required to transport silt in a canal?
a) Manning’s formula
b) Lacey’s silt theory
c) Chezy’s formula
d) Kennedy’s silt theory

Answer: b) Lacey’s silt theory
Explanation: Lacey’s silt theory is used to determine the minimum velocity required to prevent sediment deposition in a canal, thus aiding in its efficient operation.

4. What is the primary objective of lining a canal?
a) Enhancing aesthetic appeal
b) Minimizing seepage losses
c) Facilitating sediment deposition
d) Increasing evaporation losses

Answer: b) Minimizing seepage losses
Explanation: Lining a canal helps in reducing seepage losses, thus conserving water and improving the efficiency of water conveyance systems.

5. Which material is commonly used for lining canals due to its durability and impermeability?
a) Plastic
b) Wood
c) Concrete
d) Bamboo

Answer: c) Concrete
Explanation: Concrete is frequently used for lining canals due to its durability, impermeability, and resistance to erosion.

6. Hydraulic structures are primarily built for:
a) Flood control
b) Irrigation

c) Transportation
d) Recreation

Answer: a) Flood control
Explanation: Hydraulic structures such as dams, spillways, and barrages are constructed primarily for flood control purposes, although they may serve other functions as well.

7. Which hydraulic structure is designed to regulate water flow in a canal system?
a) Weir
b) Dam
c) Spillway
d) Barrage

Answer: a) Weir
Explanation: Weirs are hydraulic structures constructed across rivers or canals to regulate water flow by controlling upstream water levels.

8. Which hydraulic structure is primarily used to store water for irrigation, hydroelectric power generation, and domestic use?
a) Weir
b) Spillway
c) Dam
d) Barrage

Answer: c) Dam
Explanation: Dams are built to impound water, creating reservoirs used for various purposes such as irrigation, power generation, and water supply.

9. A spillway is designed to:
a) Divert water for irrigation
b) Store water for domestic use
c) Release excess water from a reservoir
d) Control sediment deposition

Answer: c) Release excess water from a reservoir
Explanation: A spillway is a structure built to safely release excess water from a reservoir to prevent overtopping of the dam and potential damage downstream.

10. Barrages are primarily constructed for:
a) Flood control
b) Navigation
c) Irrigation diversion
d) Hydroelectric power generation

Answer: c) Irrigation diversion
Explanation: Barrages are low-head dams built across rivers to divert water into irrigation canals, providing water for agricultural purposes.