

Chapter :1: General

1. List out major parts in India and Gujarat.
2. Short note on port administration.
3. Advantages and disadvantages of water transportation.

Chapter :2:Harbour Planning

1. What is harbour? Describe the harbour components.
2. Give the detail classification of harbour.
3. Give the requirements and site selection of good harbour.
4. Describe ship characteristics.

Chapter :3:Natural Phenomena

1. What is waves? Causes , types and characteristics of wave.
2. Short note on wave breaking and wave reflection.
3. What is tides? Give the types and uses of tides.
4. What is currents? Give the causes ,effects and types of currents.

Chapter :4:Marine Structures

1. Arrangement and factors determining selection of breakwater.
2. Describe the type of breakwater.
3. Short note on design process of breakwater.
4. Give the method of mound breakwater and wall breakwalls.
5. Short note on:
 1. Wharf
 2. Quay Wall
 3. Jetties
 4. Piers
 5. Dolphins
 6. Fenders
 7. Mooring Accessories.

Chapter :5: Docks and Locks

1. Describe Types Of Docks. (Classification)
2. Short Note On Wet Docks.
3. Short note on:
 1. Dry docks
 2. Floating docks
 3. Lift Docks
 4. Marine docks
4. Defination of Lock and Types of Lock Gates.
5. Descibe the operation of lock gates.

Chapter :6:Port Amenities

1. Short note on:
 1. Ferry
 2. Ferry Slip
 3. Floating Landing Stages.
 4. Transit Sheds.
 5. Warehouse
 6. Cold Storage.
 7. Apron
 8. Cargo Handling Equipment.

Chapter :7: Navigation Aids

1. Purchase of navigation aids.
2. Explain types of navigation aids.
3. Short note on:
 - 1: light house
 2. Beacon light
 3. Floating navigation aids.

Chapter :8: Harbour Maintenance

1. Give the causes and perfection of beach erosion.
2. What is dredging? Define objective of dredging.
3. Give the classification of dredging work.
4. Give the types of dredgers with figure.
5. Short note on –Disposal of dredged materials.