

M. Tech.-IV (Civil-Hydraulic Engineering) (CBCS – 2015 Course) :
SUMMER - 2019

SUBJECT: SELF STUDY PAPER – II PLANNING OF PORTS

Day: Thursday
Date: 13/06/2019

Time: 11.00 AM TO 02.00 PM
Max Marks. 60

S-2019-3442

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks
- 3) Answer to both the sections should be written in **SAME** Answer book.
- 4) Assume suitable data if necessary.

SECTION - I

Q.1 Elaborate the significance of factors responsible for port development along the Indian coast. (10)

OR

Q.1 Write short notes on : (10)

- a) Rail – Road linkage for development of port.
- b) Automation in the port operations.

Q.2 Explain how modern port facilities are effective to attain the loading / unloading cost / ton / day. (10)

OR

What is the need for special purpose port in addition to Major port? Explain with any case study of Indian port. (10)

Q.3 Explain the need of single buoy mooring or offshore port for handling large ships for oil transport. (10)

OR

Explain the need for short / long terms cost analysis in planning of the port policy. (10)

SECTION - II

Q.4 Write short notes on any **TWO** of the following: (10)

- a) Roll of port management in port operations
- b) Concept of outer to outer port
- c) Wave tranquility and location of specific berth

OR

Q.4 What is the effect on port planning due to limitation on depth of approach channel and siltation in port are. (10)

Q.5 What is the role of GDP / GNP on the selection of type of port and facilities to be provided? (10)

OR

What are limiting factors related to planning of port? Justify with reference to infrastructure and depth of channel. (10)

Q.6 Draw a sketch of conceptual port on east coast of India indicating location of sand trap, container berth, bulk berth and layout of breakwater. (10)

OR

Elaborate the various modes of transport of oil from SBM up to refinery when large ship like VLCC is in the port area. (10)