

**M. TECH.-IV (CIVIL-HYDRAULIC ENGINEERING) (CBCS –
2015 COURSE) : SUMMER - 2018**

SUBJECT: Self Study Paper- II i) PLANNING OF PORTS

Day: **Tuesday**
Date: **19/06/2018**

S-2018-3039

Time: **11.00 AM TO 02.00 PM**
Max Marks: 60

N.B:

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

SECTION-I

Q.1 What are the types of ports & their role in handling import/ export of the country? Enumerate the development of any port on East coast of India. (10)

OR

Write short notes on: (10)

- a) Wave tranquility & its significance in location of specific berth in harbor area.
- b) Automation in port operations.

Q.2 What are the specific requirements for planning of inner docks for container berths with reference to incoming wave flux & resonance of basin? (10)

OR

Explain how GDP & GNP are responsible for National policy & development of port facilities in the hinterland area.

Q.3 a) Draw vertical section of a typical port showing location of oil berths, pipeline & single buoy mooring (SBM) with reference to prevailing waves. (05)

b) Explain the role of dredging & disposal for the development of port carried out in stages. (05)

OR

As a coastal engineer what are field data collection requirement that you can plan for New port under influence of littoral drift & monsoon waves.

SECTION-II

Q.4 Write short notes on: (10)

- a) Concept of twin port.
- b) Special purpose berths.
- c) Lo- Lo & Ro- Ro facilities for loading/ unloading.

OR

Explain the need for national policy on port planning. (10)

Q.5 Explain how port cost analysis is related to the efficacy of the port facilities & longer operational life of structures. (10)

OR

Enumerate any port on west coast of India with reference to the principle of planning of port in stages. (10)

Q.6 When single buoy mooring (SBM) is provided? Explain the method of its protection from high waves & mode of transport to the port area. (10)

OR

What are the various measures to control coastal pollution due to oil spill in the coastal area, along shoreline & at port structures? (10)

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