

Tech (Part Time) DEGREE END SEMESTER EXAMINATION, NOV/DEC 2013
CIVIL ENGINEERING BRANCH
SIXTH SEMESTER (REGULATIONS 2009)
PTCE 9041 – TRANSPORTATION ENGINEERING- DOCKS AND HARBOUR

Time : 3 Hours

Max Marks : 100

PART –A

10 x 2 = 20 Marks)

- 1) Define a port.
- 2) What do you understand by Littoral Drift.
- 3) Name any two natural and artificial harbour
- 4) Draw the structure of a Quay wall
- 5) What are the essential needs of a navigational aid?
- 6) How is the depth of the sea measured?
- 7) Discuss the type of waves.
- 8) What is the functional feature of a Roadstead.
- 9) Define Coastal Regulation Zone.
- 10) What is a spring fender?

PART – B

(5 x 16 = 80 Marks)

- 11 Discuss the factors and site investigation of a harbor. **(16)**
- 12 a. Explain the primary and subsidiary classification of harbor. **(16)**
- (OR)**
- 12 b. Draw a layout of any one harbor in india, explain its salient features and list available terminal facilities.
- 13.a. Explain with neat sketches any four types of navigational aids and state their functions.**(16)**
- (OR)**
- 13 b.Explain the objectives and working principle of the following coastal structures with neat sketches,
- (i) spring fenders
 - (ii) floating landing stages
 - (iii) break waters **(16)**
- 14 a. Explain the principle of break waters with its neat sketch. **(16)**
- (OR)**
- 14 b. Explain the working principle of dry dock and wet dock. **(16)**
- 15 a. Explain the effect of waves on coastal protection. **(16)**
- (OR)**
- 15 b. Explain the following coastal protection works with neat sketches. **(16)**
- (i) Sea walls
 - (ii) Riprap
 - (iii) Groins
 - (iv) Dolphins