Reg. No.										

MANIPAL INSTITUTE OF TECHNOLOGY

MANIPAL

A Constituent Institution of Manipal University

III SEMESTER B.TECH. (CIVIL ENGINEERING)

END SEMESTER EXAMINATIONS, NOV/DEC 2017

SUBJECT: COASTAL ENGINEERING/ CIE 4020

REVISED CREDIT SYSTEM

(/ 11/ 2017)

Time: 3 Hours MAX. MARKS: 50

Instructions to Candidates:

- Answer **ALL** the questions.
- Missing data may be suitably assumed.

1A.	Write the classification of wave in detail.	**4M**
1B.	Derive an expression to find wave force on a vertical pile.	**6M**
2A.	Determine maximum drag and inertia force at a water depth 30m from the sea bed on a vertical pile for a given data. Diameter of a pile is equal to 2.2m, wave height of 8m and depth of water is 100m.The time period of wave is given as 12sec. Take density of water equal to 1026 kg/m^3. Take C_D=1, C_I =2	**6M**
2B.	What is wave deformation? And what are the causes for wave deformation?	**4M**
3A.	What is Littoral drift? And with a neat sketch explain phenomena of littoral drift.	**6M**
3B.	What are the factors considered in particular to coastal engineering problems?	**4M**
4A	What is coastal pollution? What are its implication?	**4M**
4B	What are Docks? And What are the facilities to be provided at a graving dry Docks?	**6M**
5A	With a neat sketch explain the procedure to determine the length, spacing and height of the groyne.	**6M**
5B	What is Coastal Erosion? And What are the causes for Coastal Erosion?	**4M**