Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

PDDC - SEMESTER–VII • EXAMINATION – SUMMER 2013

Subject Code: X70602 **Date: 14-05-2013**

Subject Name: Dock, Harbour and Airport Engg.

Time: 10.30 pm - 01.00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Distinguish between Natural and Artificial harbour with sketch.	**07**
	(b)	What are the requirements of good harbour?	**07**
Q.2	**(a)**	Explain – Littoral drift, Spring tide, Neap tide, Fetch.	**07**
	(b)	What are dolphins? Explain their types.	**07**
		OR	
	(b)	Briefly explain the methods of mound construction.	**07**
Q.3	**(a)**	Enlist the types of Dredging devices. Explain any one with sketch.	**07**
	(b)	What is mooring? Explain the accessories of Floating and fixed types moorings.	**07**
		OR	
Q.3	**(a)**	What are the factors affecting Airport Capacity?	**07**
	(b)	What are the characteristics of conventional air craft?	**07**
Q.4	**(a)**	Explain the methods adopted for protection from jet blast with sketch.	**07**
	(b)	What are the objectives of surface drainage at an airport?	**07**
		OR	
Q.4	**(a)**	How is the provision of parking of vehicles made at the airport?	**07**
	(b)	Write a short note on “Balanced Field Concept”.	**07**
Q.5	**(a)**	Explain the types of Runway pattern with neat sketch.	**07**
	(b)	Differentiate between (i) Runway and Taxiway (ii) Loading apron and Holding bays	**07**
		OR	
Q.5	**(a)**	Explain the procedure for constructing Wind rose diagram.	**07**
	(b)	Write a short note on “Visual aids”.	**07**