Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII • EXAMINATION - SUMMER 2014

Subj	ect C	ode: 180602 Date: 31-05-2014	
Subj	ect N	ame: Dock, Harbour and Airport Engineering	
		30 am TO 01:00 pm Total Marks: 70	
Instru			
	2. I	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	Explain the procedure for constructing break water. Describe air craft and its characteristics.	07 07
Q.2	(a)	Write short note on (i) Runway marking (ii) Light house.	07
	(b)	Give classification of break water and explain any one. OR	07
	(b)	Calculate the actual length of the runway from the following data: Airport elevation: 150m RL Mean of the average daily temperature: 40° C Mean of the maximum daily premature:47° C Basic length of runway: 800 m Highest point along the length: 99.2m RL Lowest point along the length: 95.2m RL.	07
Q.3	(a) (b)	What are the functions of taxiway in airport? Draw sketch of taxiway showing all components.	07 07
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Q.3	(a) (b)	What is the purpose of the navigation aids? Explain any one type of navigation aids. Write a short note on runway lighting and visual aids.	07 07
Q.4	(a) (b)	Explain silting, erosion and littoral drift. Enlist the factors to be considered in airport planning.	07 07
		OR	
Q.4	(a) (b)	Write short note on harbour maintenance. Write the advantages and disadvantages of aviation.	07 07
Q.5	(a) (b)	Enlist different types of bouys. Explain any one. Explain (i) Pay load and zero fuel weight (ii) Subsonic aircraft and supersonic aircraft	07 07
		OR	
Q.5	(a) (b)	Explain with neat diagram the action of various forces under the influence of the wave. Write short note on importance of grading and drainage in Airport.	07 07