Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII EXAMINATION - SUMMER 2016

Subject Name:Dock Harbour & Airport Engineering		Code:180602 Date:05/05/201	Date:05/05/2016 Total Marks: 70	
		:30 AM to 01:00 PM Total Marks:		
		Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a)	Draw the schematic diagram of airport layout showing all components and	07	
	(b)	briefly write function of each. Draw the schematic diagram of harbour layout showing all components and briefly write function of each.	07	
Q.2	(a) (b)	Discuss Inland Water Transport in India and National Waterways network Discuss the role of Airport Authority of India for functioning of Airports in India	07 07	
		OR		
	(b)	Define following terms (1) Fenders (2) Wharf (3) RO-RO ferry (4) Tetrapodes (5) Dredging (6) Mooring (7) Load line	07	
Q.3	(a)	Draw the neat sketch of aircraft showing all components and briefly write function of each.	07	
	(b)	Explain (1) Wind rose diagram (2) Causes of currents and its effects OR	07	
Q.3	(a)	Define (1) Stopway (2) RESA (3) Hanger (4) ATC (5) Taxiway (6) Apron (7) Threshold	07	
	(b)	Write short notes on (1) Break water (2) Jetty	07	
Q.4	(a)	The length of runway under standard conditions is 1000 mt. The airport site has an elevation of 308 mt. Its reference temperature is 20°C. If the runway is to be constructed with an effective gradient of 0.5%, determine the corrected runway length. Provide necessary check as per ICAO criterion.	07	
	(b)	Differentiate between dry dock and wet dock OR	07	
Q.4	(a) (b)	Explain planning concept of terminal building by drawing sketches Compare transit shed and warehouse	07 07	
Q.5	(a) (b)	Write short notes on (1) Localiser (2) Glide slope antenna Explain significance of Buoys and LORAN	07 07	
Q.5	(a) (b)	OR Explain Importance of Grading and Lighting system on Airport Write short notes on (1) Revetments (2) Groynes	07 07	
