

GUJARAT TECHNOLOGICAL UNIVERSITY
BE – SEMESTER – VIII. EXAMINATION – WINTER 2016

Subject Code: 180602**Date: 20/10/2016****Subject Name: Dock Harbour & Airport Engineering****Time: 02:30 PM to 05:00 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) What is the significance of water transportation compare to other modes of transportation? Explain in detail. **07**
 (b) Explain the major components of Harbour with neat diagram. **07**
- Q.2** (a) Define the following term. **07**
 1) Wave breaking 2) Wave reflection 3) Tidal range.
 (b) Describe the facilities required for a major port. **07**
- OR**
- (b) Explain silting, erosion and littoral drift. **07**
- Q.3** (a) What are the different types of break water? **07**
 (b) Explain the terms : I) Wharves & Fenders II) Quays & Jetties. **07**
- OR**
- Q.3** (a) Differentiate between dry dock and wet dock. **07**
 (b) Discuss in detail advantage and disadvantage of Air transportation. **07**
- Q.4** (a) Describe aeroplane components part with neat sketch. **07**
 (b) What are the elements to be considered in the geometric design of runway? **07**
- OR**
- Q.4** (a) Write a short note on International Civil Aviation Organisation- ICAO . **07**
 (b) What is the function of taxiway in airports? Draw cross section of taxiway showing all components. **07**
- Q.5** (a) What are the facilities required at terminal building? **07**
 (b) Explain the necessity of airport drainage. What are its special characteristics? **07**
- OR**
- Q.5** (a) Describe various components of air traffic control network. **07**
 (b) Explain the terms : I) Fuel storage area. II) Holding apron. **07**
