

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– VIII (New) EXAMINATION – WINTER 2019****Subject Code: 2180602****Date: 25/11/2019****Subject Name: 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) Define the terms: (i) Turning Basin (ii) Draft (iii) Break water **03**
 (b) Write a note on site selection for harbour **04**
 (c) Explain in detail advantages and disadvantages of air transport. **07**
- Q.2** (a) What are the important wind characteristics **03**
 (b) Draw the neat sketches for different aircraft parking system **04**
 (c) What facilities are necessary for a major port? Describe each in detail. **07**
- OR**
- (c) Describe various components of air traffic control network. **07**
- Q.3** (a) Write a note on Instrument Landing System **03**
 (b) Explain Wave breaking & Wave reflection with neat sketches **04**
 (c) Give the outline as per ICAO master planning process for planning of airports. **07**
- OR**
- Q.3** (a) Explain littoral drift **03**
 (b) Write a note on Airport Capacity **04**
 (c) What is function of taxiway in airports? Draw cross sections of taxiway showing all components. **07**
- Q.4** (a) Explain LORAN and RADAR **03**
 (b) What are functions of director general of civil aviation **04**
 (c) Differentiate between dry dock and wet dock **07**
- OR**
- Q.4** (a) Draw typical Layout of Airport Terminal Building **03**
 (b) Write a note on sea walls with neat sketch **04**
 (c) Discuss buoys, beacons and light house **07**
- Q.5** (a) Write a note on site selection for Hangers **03**
 (b) Discuss in brief : Dolphins **04**
 (c) Explain briefly requirement of an airport drainage system. **07**
- OR**
- Q.5** (a) Draw sketch showing parts of Aeroplane. **03**
 (b) Compare Mound type and Vertical wall breakwater **04**
 (c) Why fenders are provided on docking platform? Draw the sketch of wooden and rubber fenders. **07**
