

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
M.Tech., Summer 2017 - 18 Examination

Semester: 1**Subject Code: 03211130****Subject Name: Airport Engineering****Date: 31/05/2018****Time: 2:00 pm to 4:30 pm****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 A) Define airport capacity. What are the points to be considered in the selection of a site for an airport? (05)

B) Explain briefly requirement of an airport drainage system. (05)

C) Explain exit taxiway and holding apron (05)

Q.2 Answer the following questions. (Attempt any three) (Each five mark) (15)

A) What are the facilities required at airport terminal building?

B) Mention the factor affecting airport site selection.

C) Draw the sketch showing aero plane components.

D) Explain VASI and PAPI lights and their functions.

Q.3 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) Draw the schematic diagram of airport layout showing all components and briefly write function of each. (08)

OR

B) Draw the neat sketches for different aircraft parking system and also write suitability of each system (08)

Q.4 A) Discuss the role of Airport Authority of India for functioning of Airports in India (07)

OR

A) What is necessity of airport marking & runway marking? Draw layout of Runway taxiway shoulder marking. (07)

B) Give the outline as per ICAO master planning process for planning of airports. (08)