

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.ARCH. – SEMESTER– II EXAMINATION – SUMMER 2019

Subject Code: 2X25003

Date: 31/05/2019

Subject Name: Building Construction-II

Time: 10:30 AM TO 01:30 PM

Total Marks: 40

Instructions:

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

- Q1**
- a) What are the advantages of using an arch and how does an arch transfer load that is acting on it? **(02 marks)**
- b) Sketch a semi-circular arch having span of 2 meters, in a one and a half brick thick wall. Label all the parts clearly. **(06 marks)**
- Q2**
- a) What is the purpose of a weather shed and in what materials can a weather shed be constructed? **(04 marks)**
- b) What are the different applications of steel in a building? **(04 marks)**
- Q3**
- a) What is the function of a door? **(02 marks)**
- b) What are the different types of hardware used in a door? **(02 marks)**
- c) Sketch a suitable door for a 900 mm wide opening with a height of 2100 mm. Draw plan, elevation and section with any one joinery detail in larger scale. **(04 marks)**
- Q4**
- a) What are the different components of a staircase and what is the function of each part? **(04 marks)**
- b) Draw to any suitable scale a staircase of 3 meters height in any material of your choice. Draw plan and longitudinal section through the staircase. **(04 marks)**
- Q5**
- a) What are the important factors to be kept in mind in the design of a Foundation? **(04 marks)**
- b) What kind of foundation would you recommend for basement construction? Explain with sketches. **(04 marks)**
