

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-III(NEW) EXAMINATION – SUMMER 2023****Subject Code:3130607****Date:26-07-2023****Subject Name:Building Construction Technology****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.
4. Simple and non-programmable scientific calculators are allowed.

	Marks
Q.1 (a) State the purpose of site Exploration.	03
(b) Define the following terms. (1) Safe bearing capacity (2) Allowable bearing pressure.	04
(c) Enumerate different types of staircases and explain dog-legged stair case with neat sketch.	07
Q.2 (a) Give merits and demerits of flat and pitched roof.	03
(b) Draw a diagram of typical door and define its each component.	04
(c) Explain with neat sketch under reamed pile.	07
OR	
(c) Describe with neat sketch different types of Rubble masonry.	07
Q.3 (a) Write requirements of a good stair.	03
(b) Write difference between English bond and Flemish bond.	04
(c) Explain Anti-termite treatment with details.	07
OR	
Q.3 (a) Enlist common types of cofferdam.	03
(b) Draw a neat sketch of Grillage foundation	04
(c) Enlist and Explain various functions of foundation.	07
Q.4 (a) Describe the factors to be considered while selecting type of flooring.	03
(b) What is diaphragm wall? Give its uses.	04
(c) Explain with neat sketches, the form work for R.C.C Column.	07
OR	
Q.4 (a) Write difference between Caisson and Cofferdam.	03
(b) Enumerate different types of windows and explain any one with sketch.	04
(c) What is a need of temporary work? Enlist types of Scaffolding and explain any one in detail.	07
Q.5 (a) Describe various materials used for damp proofing.	03
(b) Write short note on Pneumatic caisson.	04
(c) Define green building and describe case studies of various Green buildings.	07
OR	
Q.5 (a) Describe the following terms in relation to roof: 1. Ridge 2. Purlins 3. Common rafter.	03
(b) Explain method of construction of Cement concrete flooring.	04
(c) Describe various types of pointing.	07