

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-III (NEW) EXAMINATION – WINTER 2021****Subject Code:3130607****Date:19-02-2022****Subject Name:Building Construction Technology****Time:10:30 AM TO 01:00 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) Enlist types of buildings.	03
	(b) Distinguish between shallow foundations and deep foundations.	04
	(c) Suggest and briefly explain the method of soil investigation when the depth of exploration is substantial and speed of investigation is of prime importance.	07
Q.2	(a) Explain chemical grouting method to control ground water.	03
	(b) Draw a neat sketch showing component of scaffolding.	04
	(c) Enlist types of coffer dam and explain any two with neat sketch.	07
OR		
	(c) Describe factors to be consider in order to limit fire spread.	07
Q.3	(a) Define: Racking back, Parapet, Coping	03
	(b) Discuss precautions to be taken during construction of cavity wall.	04
	(c) Draw a neat sketch of double flemish bond and discuss it's important features.	07
OR		
Q.3	(a) Define lintel and draw a neat sketch showing RCC lintel.	03
	(b) Explain uncoursed rubble masonry.	04
	(c) Discuss the method of applying cement plaster.	07
Q.4	(a) Draw a neat and labelled sketch of door shutter.	03
	(b) Describe the procedure of constructing marble flooring.	04
	(c) Enlist types of upper floors and describe any one with neat sketch.	07
OR		
Q.4	(a) Draw a neat and labelled sketch of casement window.	03
	(b) Define : 1) Scotia 2) Winders 3) Landing 4) Going	04
	(c) Classify pitched roof and explain king post truss with neat and labelled sketch.	07
Q.5	(a) Define workability of concrete and list out tests to measure it.	03
	(b) Compare the precast concrete with cast in situ concrete.	04
	(c) Describe the concept and important features of Green Building.	07
OR		
Q.5	(a) Describe the application of 3D printing in Civil Engineering.	03
	(b) Explain the causes of failure of falsework.	04
	(c) Draw a neat sketch of shuttering for RCC slab.	07
