## BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI (MID SEMESTER EXAMINATION)

CLASS: B.ARCH. SEMESTER: III
BRANCH: ARCHITECTURE SESSION: MO/2022

SUBJECT: AR202 BUILDING CONSTRUCTION AND CODES

TIME: 2 HOURS FULL MARKS: 25

## **INSTRUCTIONS:**

- 1. The total marks of the questions are 25.
- 2. Candidates attempt for all 25 marks.
- 3. Before attempting the question paper, be sure that you have got the correct question paper.
- 4. The missing data, if any, may be assumed suitably.
- 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

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Q1	(a)	Discuss the different Classification of Soil broadly w.r.t. Site construction perspective as per IS:1498.	[2]	<b>CO</b> 2	<b>BL</b> 1
Q1	(b)	How do you identify Silts and Clay of low, medium and high compressibility?	[3]	2	2
Q2	(a)	Describe the factors affecting in the selection of suitable Foundation type for any Building.	[2]	1	2
Q2	(b)	What do you understand by Shallow and Deep Foundation explain with two examples of both typologies?	[3]	3	1&2
Q3	(a)	Explain Grillage foundation with schematic diagram and its uses.	[2]	3	1
Q3	(b)	Explain the different types of earth retaining systems for deep excavations at construction sites.	[3]	1	1
Q4 Q4		What is Formwork and different aspect of a good formwork? What are the Different Classification criteria and types of Formwork?	[2] [3]	1 1	1&2 1
Q5	(a)	What is Shoring and explain its requirement and its different component with a neat sketch	[2]	3	1&2
Q5	(b)	Explain Scaffolding including its types and different components with the help of sketch.	[3]	3	1

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