## BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI (MID SEMESTER EXAMINATION SP2023)

CLASS: B.ARCH SEMESTER: II
BRANCH: ARCHITECTURE SESSION: SP/2023

**SUBJECT: AR151 ADVANCED BUILDING MATERIALS** 

TIME: 02 HOURS FULL MARKS: 25

## **INSTRUCTIONS:**

- 1. The question paper contains 5 questions each of 5 marks and total 25 marks.
- 2. Attempt all questions.
- 3. The missing data, if any, may be assumed suitably.
- 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates

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Q.1(a) Q.1(b)	What are different forms of aluminum? Describe each of them with suitable example. Enumerates the various copper alloys in details?	[2] [3]	CO 1 1	BL 2 1
Q.2(a) Q.2(b)	What is an alloy? How is it formed? Mention the characteristics of Aluminum as an important building material.	[2] [3]	1 1	2 2
Q.3(a)	Write short notes on: a. Duralumin b. Naval brass	[2]	2	1
Q.3(b)	What are the characteristics of a good tile?	[3]	5	2
Q.4(a)	Give reasons  a. the floor tiles should be hard and durable.  b. The tiles are dried under shade.	[2]	5	3
Q.4(b)	What are difference in the requirements of floor tiles and wall tiles? In what places would you consider tiling the walls?	[3]	5	4
Q.5(a)	Write short notes on:  a. Electrolytic theory of corrosion.  b. Stress corrosion.	[2]	2	2
Q.5(b)	Explain the different theories of Corrosion detailing any one of them.	[3]	2	4

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