

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)**

**CLASS: B. ARCH.
BRANCH: ARCHITECTURE**

**SEMESTER : I
SESSION : MO/2022**

SUBJECT: AR102 PRIMARY BUILDING MATERIALS

TIME: 3 Hours

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q.1(a)	What are the constituents of good brick earth? How does excess of each of the constituents affects the quality of bricks?	[5] 2	1
Q.1(b)	What are the various uses and properties of stones.	[5] 3	3
Q.2(a)	How is Pig Iron manufactured? What are the different types of Pig iron.	[5] 1	2
Q.2(b)	What is seasoning of timber? Why is it required? State various methods of seasoning and explain any two.	[5] 2	3
Q.3(a)	What is cement? What are its ingredients? State the function of each ingredient.	[5] 3	3
Q.3(b)	Describe in detail what is meant by the bulking of sand.	[5] 2	3
Q.4(a)	Define mortar and discuss its varieties on the basic of nature of application.	[5] 1	3
Q.4(b)	How is fat lime manufactured? Explain.	[5] 3	2
Q.5(a)	a. Give reason why extreme care is taken care when quick setting cement is used. b. What is the difference between initial setting time and final setting time?	[5] 2	4
Q.5(b)	How concrete transported and what are the precaution to be taken during the placing of concrete?	[5] 3	3

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