

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

**CLASS: BARCH
BRANCH: ARCH**

**SEMESTER : I
SESSION : MO/19**

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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- Q.1(a) Define bond. Distinguish with the help of sketches between a wall in English bond and a wall in the Flemish bond. [5]
- Q.1(b) How is artificial stone prepared? What are its different forms also mention the advantages of artificial stone? [5]
- Q.2(a) Describe the manufacturing process of pig-iron by blast furnace. [5]
- Q.2(b) What is the seasoning of timber? Why is it required? State various methods of seasoning and explain anyone. [5]
- Q.3(a) What is cement? What are its ingredients? State the function of each component. [5]
- Q.3(b) What is meant by the bulking of sand? Explain it. [5]
- Q.4(a) What is the mortar? Briefly describe the various types of mortars. [5]
- Q.4(b) Explain the different constituents of Limestone? [5]
- Q.5(a) What are the materials used in making R.C.C. work? [5]
- Q.5(b) Write short notes on the following [5]
- a. formwork for concrete
 - b. Ready-mix concrete

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