

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

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

**SEMESTER : 1ST  
SESSION : MO/2024**

**SUBJECT: AR102 PRIMARY 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)	Define bond. Distinguish with the help of sketches between a wall in the English bond and a wall in the Flemish bond.	[2] 1	2
Q.1(b)	Explain the manufacturing process of bricks in detail.	[3] 1	3
Q.2(a)	What is brick? What are the requirements of good quality bricks?	[2] 1	2
Q.2(b)	Discuss the operation of preparation of clay for the manufacture of bricks.	[3] 1	1
Q.3(a)	What is Artificial Stone? Mention the advantages of Artificial Stone.	[2] 2	2
Q.3(b)	What are stone's various uses and properties as an engineering building material?	[3] 1	2
Q.4(a)	What is meant by the dressing of a stone? Describe its various varieties.	[2] 2	2
Q.4(b)	Give reasons: - A frog is placed on raw bricks during moulding A small quantity of iron oxide is desirable in good brick earth.	[3] 2	3
Q.5(a)	Discuss the important varieties of iron ores.	[2] 2	2
Q.5(b)	Explain the manufacturing process of pig iron using a blast furnace.	[3] 1	1

**.....22/10/2024.....E**