

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

**CLASS: B.Tech
BRANCH: Civil**

**SEMESTER : III
SESSION : MO/2025**

SUBJECT: CE24204 BUILDING MATERIALS AND CONSTRUCTION

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.
-

		CO	BL
Q.1(a)	Explain physical and chemical classification of rocks and its types.	[5]	1 K1
Q.1(b)	Discuss the process of burning bricks in intermittent kiln.	[5]	1 K1
Q.2(a)	Draw the flow diagrams for mixing of raw materials by dry process and wet process for the manufacture of ordinary cement.	[5]	2 K2
Q.2(b)	Describe the properties of a good mortar and explain the chemical proportion of cement.	2	K1
Q.3(a)	Define foundations and its types. Explain the shallow foundations and deep foundations.	[5]	3 K2
Q.3(b)	Define walls and its types. Define Flemish bond with sketch.	[5]	3 K2
Q.4(a)	Explain the grading of aggregates. What is meant by curing of concrete? What are its purposes?	[5]	3 K3
Q.4(b)	Discuss about the materials of damp proofing.	[5]	3 K3
Q.5(a)	Explain Plastering and method of plastering and its common defects.	[5]	4 K3
Q.5(b)	Write the types of drainage pipes and systems of plumbing for wastewater drainage.	[5]	4 K3

:::25/11/2025:::E