

B. CONS. ENGG. 2ND YR 1st SEMESTER SUPPLEMENTARY EXAM-2023**MATERIALS OF CONSTRUCTION****Time : Three hours****Full Marks : 100****Instructions: Use Separate Answer Scripts For Each Group/Part Etc.
Answer All Questions**

No. of Questions	Part -I (50 MARKS)	Marks
Q1. a	What are the physical requirements/Criteria of AAC Blocks as per IS: 2185?	10
Q1.b	What kind of precautions have to be taken during the laying of AAC Block? Discuss in brief.	10
Q2.	Describe Dry Process of manufacturing cement with neat sketch.	15
Q3.	What is flakiness and elongated index of coarse aggregate? Explain with a sketch.	05
Q4.	What is the full form of TMT Bar? Some rebars are marked with "Fe500D". Explain the word D on the reinforcement bars.	10

[Turn over

BE SECOND YEAR FIRST SEMESTER (CONSTRUCTION) EXAMINATION - 2023

Subject : **MATERIALS OF CONSTRUCTION**

Time : 3 hours

PART II (50 Marks)**Full Marks : 100**Answer parts of any question **SERIALLY**.

Answer **Question No. 1** & any **TWO** questions. Please start answering a question or part thereof from a **NEW** page. Answers should be brief. Please mark the answers with answer numerical & NOT as 'CO' Nos. which are for Course Curriculum from NAB concepts & students do NOT have any relation & relevance to the same.

Different parts of the same question should be answered together.

1.	Discuss in brief the characteristics of Durable Building Stones. Enumerate the merits & demerits of using Stone Masonry over conventional Brick Masonry. Distinguish between Ashler & RubbleMasonry 6 X 3 = 18	CO1 [18]
2.	Discuss the usage & applicability of Terra-Cotta & Glazed white-ware products with reference to their relevance to construction industry. Why is heart wood preferred by carpenters' as compared to sap wood. Enumerate the methodology of Timber Seasoning, with reference to natural & kiln process.. 6 + 4 + 6 = 16	CO3, CO4 [16]
3.	Elaborate the constituent parts of paints & indicate their relevance in the construction process. Discuss the relevance & cardinality of the BIS codes IS:3495 (Parts 1- 3):1992) with IS:1077:1992 for the test of various parameters of burnt clay bricks. Indicate the steps of manufacture of Cement by wet process. 6 + 5 + 5 = 16	CO5, CO2, CO6 [16]
4.	Discuss various types of bonds & closers used in masonry. Distinguish between brick copings & corbels. Enumerate the salient terms used in stairs. How are shores different from scaffolds ? Estimate the various forms of false works used in construction practice with reference to scaffolding. 3 + 2 + 3 + 4 + 4 = 16	CO2, CO7, CO8 [16]