

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION MO/2023)

CLASS: B.TECH
BRANCH: CIVIL

SEMESTER : VII
SESSION : MO/2023

SUBJECT: CE413 CONCRETE TECHNOLOGY

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) | What are the main stages in the manufacture of OPC? | [2.5] | 1 1 |
| Q.1(b) | What are the common deleterious materials found in the aggregate? | [2.5] | 1 1 |
| Q.2(a) | How does the shape of the aggregate particle affect the properties of fresh concrete? | [2.5] | 1 2 |
| Q.2(b) | What are the broad types of admixture? | [2.5] | 1 1 |
| Q.3(a) | What is meant by the segregation of a concrete mix? | [2] | 3 1 |
| Q.3(b) | Define workability of concrete and discuss why workability of concrete reduces with time. | [3] | 3 2 |
| Q.4(a) | Discuss the different methods of curing. | [2] | 3 1 |
| Q.4(b) | Discuss the advantages of usage for ready-mix concrete. | [3] | 3 2 |
| Q.5(a) | Discuss the differences between Volume Batching and Weigh batching for making of concrete. | [2] | 3 1 |
| Q.5(b) | Discuss the different methods adopted for the transportation of concrete. | [3] | 3 1 |

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