

Lecture 4.27: Concrete Mix Design and its importance.

Concrete Technology (DI04006011)

Civil Engineering Department

Lecture Agenda

- 1. Concrete Mix Design and its importance.
- 2. Summary and Q&A

4.2 Concrete Mix Design and its importance.

- Concrete Mix Design is the process of selecting suitable ingredients and determining their relative quantities.
- Objective 1: Achieve the specified characteristic compressive strength at a given age (usually 28 days).
- Objective 2: Attain required workability for easy placement and compaction.
- Objective 3: Ensure maximum durability in the given environmental exposure conditions.
- Objective 4: Produce concrete as economically as possible by optimizing cement content.

Summary

- Recap of the specific material properties and methods discussed.
- Always refer back to the standard IS codes for parameter limits.