

Lecture 3.20: Creep and Shrinkage of Concrete & its effect, factors affecting Creep and shr...

Concrete Technology (DI04006011)

Civil Engineering Department

Lecture Agenda

- 1. Creep and Shrinkage of Concrete & its effect, factors affecting Creep and shrinkage.
- 2. Summary and Q&A

3.4 Creep and Shrinkage of Concrete & its ef...

- Creep: Time-dependent permanent deformation of concrete under sustained load.
- Factors affecting Creep: Magnitude of load, age at loading, moisture content, w/c ratio.
- Shrinkage: Reduction in volume of concrete mainly due to loss of moisture.
- Types of Shrinkage: Plastic shrinkage (before setting) and Drying shrinkage (hardened state).
- Effects: Leads to cracking, increased deflection, and loss of prestress in prestressed concrete.

Summary

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