

# PNS SCHOOL OF ENGINEERING & TECHNOLOGY

## LESSON PLAN

BRANCH-CIVIL	SEMESTER-3RD	NAME OF THE FACULTY:- Er. SUPRAVA TARAI
SUBJECT-BUILDING MATERIALS & CONCRETE TECHNOLOGY	NO OF DAYS PER WEEK - 2 CLASS ALLOTTED-30	SEMESTER FROM-14/07/2025 TO 15/11/2025
WEEK	CLASS DAY	THEORY TOPIC
1ST	1ST	Identify various sizes of available coarse aggregates from sample of 10 kg in laboratory and prepare report (60,40,20,10 mm)
	2ND	Identify various layers and types of soil in foundation pit by visiting at least 3 construction sites in different locations of city and prepare report consisting photographs and samples
2ND	1ST	Select first class, second class and third-class bricks from the stake of bricks and prepare report based on its properties.
	2ND	Measure dimensions of 10 bricks and find average dimension and weight. Perform field tests - dropping, striking and scratching by nail and correlate the results obtained.
3RD	1ST	Identify different types of flooring tiles such as vitrified tiles, ceramic tiles, glazed tiles, mosaic tiles, anti-skid tiles, chequered tiles, paving blocks and prepare report about the specifications.
	2ND	Apply two or more coats of selected paint on the prepared base of a given wall surface for the area of 1m x 1m using suitable brush/rollers adopting safe practices.
4TH	1ST	Prepare the cement mortar of proportion 1:3 or 1:6 using cement and sand only.
	2ND	Determine fineness of cement by Blaine's air permeability apparatus Or by sieving.
5TH	1ST	Determine specific gravity, standard consistency, initial and final setting times of cement.
	2ND	Determine compressive strength of cement.
6TH	1ST	Determine bulking of sand.
	2ND	Determine bulk density of fine and coarse aggregates.
7TH	1ST	Determine water absorption of fine and coarse aggregates.
	2ND	Determine Fineness modulus of fine aggregate by sieve analysis.
8TH	1ST	Determine workability of concrete by slump cone test.
	2ND	Determine workability of concrete by compaction factor test
9TH	1ST	To prepare concrete mix of a particular grade as per IS 10262:2019 and determine compressive strength of Concrete for 7 and 28 days.
	2ND	Demonstration of NDT equipment
10TH	1ST	Finess modulus of sieve analys repeat and continue
	2ND	Workability of of concrete slump cone repeat and continue
11TH	1ST	Compaction factor test repeat and continue.
	2ND	Compressive strength test of conc for 7&28 days repeat and continue
12TH	1ST	Determine bulking of sand repeat & continue
	2ND	Compaction factor test repeat and continue.
13TH	1ST	NDT equipment test repeat and continue
	2ND	Types of tile test repeat & continue.
14TH	1ST	Determine specific gravity, standard consistency, initial and final setting times of cement repeat and continue
	2ND	Compressive strength test of cement repeat & continue
15TH	1ST	Measure dimensions of 10 bricks and find average dimension and weight. Perform field tests repeat & continue
	2ND	Bulk density of fine & coarse aggregate test repeat & continue.

---

*SIGN OF LECTURE*

*HOD SIGN*

*PRINCIPAL SIGN*