

LESSON PLAN OF **CEPC213 PR:2 Mechanics of Materials Lab.** FOR THE SESSION 2025-26(WINTER-2025) BATCH-2024-27, GOVT. POLYTECHNIC, KANDHAMAL



Discipline: civil engineering	Semester: 3rd	Name of the Teaching Faculty: Swastik Pradhan, Lect. in Civil Engg.
Subject: CEPC213 PR:2 Mechanics of Materials Lab.	No. of days/ per week class allotted: 4	Semester From Date : 14/07/2025 to Date: 15/11/2025 No. of Weeks: 15
Week	Class Day	Theory/ Practical Topics (as per Blooms Taxonomy)
1st	1st	Study and understand the use and components of Universal Testing Machine (UTM)
	2nd	Study and understand the use and components of Universal Testing Machine (UTM)
	3rd	Study and understand the use and components of Universal Testing Machine (UTM)
	4th	Study and understand the use and components of Universal Testing Machine (UTM)
2nd	1st	Perform Tension test on mild steel as per IS:432(1) and bend rebend test on mild steel
	2nd	Perform Tension test on mild steel as per IS:432(1) and bend rebend test on mild steel
	3rd	Perform Tension test on mild steel as per IS:432(1) and bend rebend test on mild steel
	4th	Perform Tension test on mild steel as per IS:432(1) and bend rebend test on mild steel
3rd	1st	Perform tension test on Tor steel as per IS:1608, IS:1139 and bend -rebend test on Tor Steel
	2nd	Perform tension test on Tor steel as per IS:1608, IS:1139 and bend -rebend test on Tor Steel
	3rd	Perform tension test on Tor steel as per IS:1608, IS:1139 and bend -rebend test on Tor Steel
	4th	Perform tension test on Tor steel as per IS:1608, IS:1139 and bend -rebend test on Tor Steel
4th	1st	Conduct compression test on Concrete cube using Compression Testing Machine.
	2nd	Conduct compression test on Concrete cube using Compression Testing Machine.
	3rd	Conduct compression test on Concrete cube using Compression Testing Machine.
	4th	Conduct compression test on Concrete cube using Compression Testing Machine.

Swastik
11/07/2025
Gautam

5th	1st	Conduct Izod Impact test on three metals. e.g. mild steel/ brass/ aluminum/ copper /castiron etc. as per IS:1598.
	2nd	Conduct Izod Impact test on three metals. e.g. mild steel/ brass/ aluminum/ copper /castiron etc. as per IS:1598.
	3rd	Conduct Izod Impact test on three metals. e.g. mild steel/ brass/ aluminum/ copper /castiron etc. as per IS:1598.
	4th	Conduct Izod Impact test on three metals. e.g. mild steel/ brass/ aluminum/ copper /castiron etc. as per IS:1598.
6th	1st	Conduct Charpy Impact test on three metals. e.g. mild steel/ brass/ aluminum/ copper /castiron etc. as per IS:1757.
	2nd	Conduct Charpy Impact test on three metals. e.g. mild steel/ brass/ aluminum/ copper /castiron etc. as per IS:1757.
	3rd	Conduct Charpy Impact test on three metals. e.g. mild steel/ brass/ aluminum/ copper /castiron etc. as per IS:1757.
	4th	Conduct Charpy Impact test on three metals. e.g. mild steel/ brass/ aluminum/ copper /castiron etc. as per IS:1757.
7th	1st	Conduct Charpy Impact test on three metals. e.g. mild steel/ brass/ aluminum/ copper /castiron etc. as per IS:1757.
	2nd	Conduct Charpy Impact test on three metals. e.g. mild steel/ brass/ aluminum/ copper /castiron etc. as per IS:1757.
	3rd	Determine Water Absorption on bricks per IS:3495 (part II), IS:1077 or tile IS:1237.
	4th	Determine Water Absorption on bricks per IS:3495 (part II), IS:1077 or tile IS:1237.
8th	1st	Determine Water Absorption on bricks per IS:3495 (part II), IS:1077 or tile IS:1237.
	2nd	Determine Water Absorption on bricks per IS:3495 (part II), IS:1077 or tile IS:1237.
	3rd	Determine Water Absorption on bricks per IS:3495 (part II), IS:1077 or tile IS:1237.
	4th	Determine Water Absorption on bricks per IS:3495 (part II), IS:1077 or tile IS:1237.
9th	1st	Determine Water Absorption on bricks per IS:3495 (part II), IS:1077 or tile IS:1237.
	2nd	Determine Water Absorption on bricks per IS:3495 (part II), IS:1077 or tile IS:1237.
	3rd	Determine Compressive strength of dry and wet bricks as per IS:3495(part I), IS:1077
	4th	Determine Compressive strength of dry and wet bricks as per IS:3495(part I), IS:1077
10th	1st	Determine Compressive strength of dry and wet bricks as per IS:3495(part I), IS:1077
	2nd	Determine Compressive strength of dry and wet bricks as per IS:3495(part I), IS:1077
	3rd	Determine Compressive strength of dry and wet bricks as per IS:3495(part I), IS:1077

(Sprue
 110x11
 1st dry
 110)

	4th	Conduct Flexural test on concrete beam on rectangular section as per Indian Standards.
11th	1st	Conduct Flexural test on concrete beam on rectangular section as per Indian Standards.
	2nd	Conduct Flexural test on concrete beam on rectangular section as per Indian Standards.
	3rd	Conduct Flexural test on concrete beam on rectangular section as per Indian Standards.
	4th	Conduct Flexural test on concrete beam on rectangular section as per Indian Standards.
12th	1st	Abrasion test of floor tiles
	2nd	Abrasion test of floor tiles
	3rd	Abrasion test of floor tiles
	4th	Abrasion test of floor tiles
13th	1st	Abrasion test of floor tiles
	2nd	Abrasion test of floor tiles
	3rd	Abrasion test of floor tiles
	4th	Abrasion test of floor tiles
14th	1st	Abrasion test of floor tiles
	2nd	Flexural test of floor tiles/roof tile
	3rd	Flexural test of floor tiles/roof tile
	4th	Flexural test of floor tiles/roof tile
15th	1st	Flexural test of floor tiles/roof tile
	2nd	Flexural test of floor tiles/roof tile
	3rd	Flexural test of floor tiles/roof tile
	4th	Flexural test of floor tiles/roof tile

S. P. Dhalwar
 111/181/m
 (1st year II)
 Civil 11

S. P. Dhalwar
 14/02/2025

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