LE	SSON PLAN C	OF 3 <sup>RD</sup> SEMESTER(2025-26) CIVIL ENGINEERING
Discipline :-	Semester:-3 <sup>RD</sup>	Name of the Teaching Faculty
CIVIL ENGG.		SHRIYA SUMAN PRUSTY(LECTURER)
Subject:-	No of Days/per	Semester From:- <u>14/07/2025</u> To:- <u>15/11/2025</u>
BUILDING CONSTRUCTION (CEPC201)	Week Class Allotted :-03	No of Weeks:- 18
Week	Class Day	Theory/ Practical Topics
	1 <sup>st</sup>	Overview of Building Components Classification of Buildings as per National Building Code Group A to I, as per Types of Constructions- Load Bearing Structure, Framed Structure, Composite Structure.
1 st	2 <sup>nd</sup>	Building Components – Functions of Building Components,
	3 <sup>rd</sup>	Substructure – Foundation, Plinth.
2 <sup>nd</sup>	1 <sup>st</sup>	Superstructure – Walls, Partition wall, Cavity wall, Sill, Lintel, Doors and Windows, Floor, Mezzanine floor, Roof, Columns, Beams, Parapet.
	2 <sup>nd</sup>	Construction of Substructure  Job Layout: Site Clearance, Layout for Load Bearing Structure.
	3 <sup>rd</sup>	Framed Structure by Center Line and Face Line Method, Precautions.
3 <sup>rd</sup>	1 <sup>st</sup>	Earthwork: Excavation for Foundation, Timbering and Strutting.
	2 <sup>nd</sup>	Earthwork for embankment, Material for plinth Filling, Tools and plants used for earthwork.
	3 <sup>rd</sup>	Foundation: Functions of foundation.
4 <sup>th</sup>	1 <sup>st</sup>	Types of foundation – Shallow Foundation, Stepped Footing, Wall Footing, Column Footing, Isolated.
	2 <sup>nd</sup>	Combined Column Footing, Raft Foundation, Grillage Foundation.
	3 <sup>rd</sup>	Deep Foundation – Pile Foundation, Well foundation.
5 <sup>th</sup>	1 <sup>st</sup>	Caissons, Pumping Methods of Dewatering, Deep wells, Well points, Cofferdams (Introduction only).
	2 <sup>nd</sup>	Construction of Superstructure Stone Masonry: Terms used in stone masonry- facing, backing, hearting, through stone, corner stone, cornice.
	3 <sup>rd</sup>	Types of stone masonry: Rubble masonry, Ashlar Masonry and their types. Joints in stone masonry and their purpose.
6 <sup>th</sup>	1 <sup>st</sup>	Selection of Stone Masonry, Precautions to be taken in Stone Masonry Construction.
	2 <sup>nd</sup>	Brick masonry: Terms used in brick masonry- header, stretcher, closer, quoins, course, face, back, hearting, bat bond, joints, lap, frog line, level and plumb.
	3 <sup>rd</sup>	Bonds in brick masonry- header bond, stretcher bond, English bond and Flemish bond.
7 <sup>th</sup>	1 <sup>st</sup>	Requirements of good brick masonry. Junctions in brick masonry and their purpose and procedure.
	2 <sup>nd</sup>	Precautions to be observed in Brick Masonry Construction. Comparison between stone and Brick Masonry.
	3 <sup>rd</sup>	Tools and plants required for construction of stone and brick masonry. Hollow concrete block masonry and composite masonry.
	1 <sup>st</sup>	Scaffolding and Shoring: Purpose, Types of Scaffolding, Process of Erection and Dismantling. Purpose.
8 <sup>th</sup>	2 <sup>nd</sup>	Types of Shoring, Underpinning. Formwork: Definition of Formwork.
The gir	3 <sup>rd</sup>	Requirements of Formwork, Materials used in Formwork, Types of Formwork, Removal of formwork.
9 <sup>th</sup>	1 st	Building Communication and Ventilation  Horizontal Communication: Doors –Components of Doors, Full Paneled Doors,  Partly Paneled.
		ENGINEER

	2 <sup>nd</sup>	Glazed Doors, Flush Doors, Collapsible Doors, Rolling Shutters, Revolving Doors,
	3 <sup>rd</sup>	Glazed Doors. Sizes of Door recommended by BIS.  Windows: Component of windows, Types of Windows – Full Paneled, Partly
		Paneled and Glazed, wooden, Steel, Aluminum windows, Sliding Windows.
	1"	Louvered Window, Bay window, Corner window, clear storey window, Gable and
10 <sup>th</sup>		Dormer window, Skylight. Sizes of Windows recommended by BIS. Ventilators.
	2 <sup>nd</sup>	Fixtures and fastenings for doors and windows.
	3 <sup>rd</sup>	Material used and functions of Window Sill and Lintels, Shed / Chajja.
11 <sup>th</sup>	1 <sup>st</sup>	Vertical Communication: Means of Vertical Communication.
	2 <sup>nd</sup>	Stair Case, Ramps, Lift, Elevators and Escalators. Terms used in staircase steps,
		tread, riser, nosing, soffit, waist slab, baluster, balustrade, scotia, hand rails.
	3 <sup>rd</sup>	Newel post, landing, headroom, winder. Types of staircase (On the basis of shape
		Straight, dog-legged, open well.
	1 <sup>st</sup>	Spiral, quarter turn, bifurcated, Three quarter turn and Half turn, (On the basis of
		Material): Stone, Brick, R.C.C., wooden and Metal.
a ath	2 <sup>nd</sup>	Building Finishes
12 <sup>th</sup>		Floors and Roofs: Types of Floor Finishes
	3 <sup>rd</sup>	Its suitability- Kota, Marble, Granite, Ceramic Tiles, Vitrified, Chequered Tiles,
		Paver Blocks.
	1 <sup>st</sup>	Concrete Floors, wooden Flooring, Skirting and Dado.
13 <sup>th</sup>	2 <sup>nd</sup>	Process of Laying and Construction, Finishing.
	3 <sup>rd</sup>	Polishing of Floors, Roofing Ma terials- RCC, Mangalore Tiles, AC Sheets.
14 <sup>th</sup>	1 <sup>st</sup>	G.I. sheets, Corrugated G.I. Sheets, Plastic and Fibre Sheets.
	2 <sup>nd</sup>	Types of Roof: Flat roof, Pitched Roof- King Post truss.
	3 <sup>rd</sup>	Queen Post Truss, terms used in roofs.
	1 <sup>st</sup>	Wall Finishes: Plastering – Necessity of Plastering.
th	2 <sup>nd</sup>	Procedure of Plastering, Single Coat Plaster, Double Coat Plaster, Rough finish,
15 <sup>th</sup>		Neeru Finishing.
	3 <sup>rd</sup>	Plaster of Paris (POP). Special Plasters- Stucco plaster, sponge finish.
16 <sup>th</sup>	1 <sup>st</sup>	Pebble finish. Plaster Board and Wall Claddings.
	2 <sup>nd</sup>	Precautions to be taken in plastering.
	3 <sup>rd</sup>	Defects in plastering. Painting.
17 <sup>th</sup>	1 <sup>st</sup>	Necessity, Types of painting.
	2 <sup>nd</sup>	Procedure of Painting.
	3 <sup>rd</sup>	Painting –Necessity.
18 <sup>th</sup>	1 <sup>st</sup>	Surface Preparation for painting.
	2 <sup>nd</sup>	Methods of Application.
	3 <sup>rd</sup>	Discussion of previous topic.

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