

SYNERGY POLYTECHNIC, BBSR		
The Lesson Plan		
Discipline: CE	Semester: 6th	Name of the Teaching Faculty: Mr. Soumya Ranjan Behera
Subject: BC	No of Days/per week class allotted: 3	Semester from Date: 14.07.2025 to Date: 15.11.2025 No of Weeks:
Week	Class Day	
1st	1st	Brick masonry: Terms used in brick masonry. Bonds in brick masonry- header bond, stretcher bond, English bond and Flemish bond.
	2nd	Requirements of good brick masonry. Junctions in brick masonry and their purpose and procedure. Precautions to be observed in Brick Masonry Construction. Comparison between stone and Brick Masonry
	3rd	Tools and plants required for construction of stone and brick masonry. Hollow concrete block masonry and composite masonry
2nd	1st	Scaffolding and Shoring: Purpose, Types of Scaffolding, Process of Erection and Dismantling.
	2nd	Purpose and Types of Shoring, Underpinning. Formwork: Definition of Formwork, Requirements of Formwork, Materials used in Formwork, Types of Formworks, Removal of formwork
	3rd	
3rd	1st	Horizontal Communication: Doors –Components of Doors, Full Paneled Doors, Partly Paneled and Glazed Doors, Flush Doors, Collapsible Doors, Rolling Shutters, Revolving Doors, Glazed Doors. Sizes of Door recommended by BIS
	2nd	
	3rd	Windows: Component of windows, Types of Windows – Full Paneled, Partly Paneled and Glazed, wooden, Steel, Aluminum windows, Sliding Windows, Louvered Window, Bay window, Corner window, clear storey window, Gable and Dormer window, Skylight. Sizes of Windows recommended by BIS. Ventilators.
4th	1st	
	2nd	Fixtures and fastenings for doors and windows
	3rd	Material used and functions of Window Sill and Lintels, Shed / Chajja.

S. Behera
Sign of Faculty

AB
HOD 11/07/25

Principal
11/7/25

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Week	Class Day	Theory/Practical Topics
1st	1st	Vertical Communication: Means of Vertical Communication- Stair Case, Ramps, Lift, Elevators and Escalators.
	2nd	Terms used in staircase steps, tread, riser, nosing, soffit, waist slab, baluster, balustrade, scotia, hand rails, 8 Second Year Diploma CE_Orissa/First Draft/January,2025 7 newel posts, landing, headroom, winde
	3rd	Types of stair case (On the basis of shape): Straight, dog-legged, open well, Spiral, quarter turn, bifurcated, three quarter turn and half turn, (On the basis of Material): Stone, Brick, R.C.C., wooden and Metal.
2nd	1st	
	2nd	Floors and Roofs: Types of Floor Finishes and its suitability- Kota, Marble, Granite, Ceramic Tiles, Vitrified, Chequered Tiles, Paver Blocks, Concrete Floors
	3rd	wooden Flooring, Skirting and Dado. Process of Laying and Construction, Finishing and Polishing of Floors, Roofing materials- RCC, Mangalore Tiles, AC Sheets, G.I. sheets, Corrugated G.I. Sheets, Plastic and Fiber Sheets.
3rd	1st	Types of Roofs: Flat roof, Pitched Roof King Post truss, Queen Post Truss, terms used in roofs
	2nd	Wall Finishes: Plastering – Necessity of Plastering, Procedure of Plastering, Single Coat Plaster, Double Coat Plaster, Rough finish, Neeru Finishing and Plaster of Paris (POP).
	3rd	
4th	1st	Special Plasters- Stucco plaster, sponge finish, pebble finish
	2nd	Plaster Board and Wall Claddings. Precautions to be taken in plastering, defects in plastering.
	3rd	Painting – Necessity, Types of painting and procedure of Painting.
5th	1st	
	2nd	Painting –Necessity, Surface Preparation for painting, Methods of Application.
	3rd	DCC

S. Behera
11.07.25
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Ans
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