

# BALASORE SCHOOL OF ENGINEERING, BALASORE

LESSON PLAN/SEMESTER:- 3RD

SUBJECT:- BUILDING MATERIAL(TH-3)

NAME OF THE FACULTY :- D.Barik

Branch-civil engg

SL. No.	CH. NO.	Month	DATE	NAME OF THE CHAPTER/OBJECTIVES	NO. OF PERIOD AVAIL. AS PER SYLLABUS	NO. OF PERIODS AVAILABLE AS PER PLAN
1	CH-1	sep	22/09	<b>Stone</b> 1.1 Classification of rock,	05	04
2			23/09	uses of stone, natural bed of stone		
3			29/09	1.2 Qualities of good building stone, 1.3 Dressing of stone		
4			30/09	1.4 Characteristics of different types of stone and their uses		
5	CH-2	oct	13/10	<b>Bricks</b> 2.1 Brick earth – its composition 2.2 Brick making – Preparation of brick earth	06	04
6			14/10	Moulding, Drying, Burning in kilns (continuous Process)		
7			20/10	2.3 Classification of bricks, size of traditional and modular bricks		
8			21/10	qualities of good building bricks		
9	CH-3		27/10	<b>Cement, Mortar and Concrete</b> 3.1 Cement: Types of cements, Properties of cements, Manufacturing of cement	07	06
10			28/10	3.2 Importance and application of blended cement with fly ash and blast furnace slag		
11			03/11	3.3 Mortar: Definition and types of mortar 3.4 Sources and classification of sand, Bulking of sand		
12			04/11	3.5 Use of gravel, morrum and fly ash as different building material		
13			nov	10/11		
14	11/11	,, mechanical properties and grading of aggregates mixing, placing, compacting & CURING OF CONCRETE				
15	Ch-4		24/11	<b>Other Construction Materials</b> 4.1 Timber: Classification timber.. Structure of	07	07

			timber		
16		25/11	4.2 Seasoning of timber – Importance 4.3 Characteristics of good Timber		
17		01/12	4.3 Clay products and refractory materials – Definition and Classification		
18		02/12	4.4 Properties and uses of refractory materials- tiles terracotta, porcelain glazing		
19		08/12	4.5 Iron and Steel: Uses of cast iron, wrought iron		
20	CH-5	09/12	<b>Surface Protective Materials</b> 5.1 Composition of Paints, enamels, varnishes.	05	03
21		15/12	5.2 Types and uses of surface protective materials like Paints, Enamels, Varnishes,		
22		16/12	Distempers, Emulsion, French polish and Wax Polish		

**Brief Summary of the Plan**

SL NO	MONTH	UNITS/CHAPTER TO BE COVERED	% OF COVERAGE
1	sep	Ch-1	15%
2	oct	Ch-2,CH-3....	15%
3	nov	CH-3,ch-4....	10%
4	dec	CH-4,ch-5	10%

*Deelali Barm*  
Signature of the Faculty

Date 13.09.2022

*[Signature]*  
Signature of the Principal

Date

**BALASORE SCHOOL OF ENGINEERING, BALASORE**

LESSON PLAN FOR 3<sup>RD</sup> SEMESTER SEMESTER

SESSION -2022/23

BRANCH-CIVIL ENGINEERING				SEMESTER:3TH		
SUBJECT- construction technology				THEORY-03		
NAME OF TEACHER_ TANMAYEE BEHERA						
SL. No.	CH. NO.	MONTH	DATE	TOPICS TO BE COVERED	NO. OF PERIOD AVAILABLE AS PER SYLLABOUS	NO. OF PERIODS AVAILABLE AS PER PLAN
01	01	SEPT	19/9/22	PART: B (CONSTRUCTIONS TECHNOLOGY) 1.1 Buildings and classification of buildings based on occupancy	02	03
02			20/9/22	1.2 Different components of a building..		
03			24/9/22	1.3 Site investigation – objectives, site reconnaissance and explorations		
04	02	SEPT	26/9/22	Foundations 2.1 Concept of foundation and its purpose 2.2 Types of foundations – shallow and deep	04	03
05			27/9/22	2.3 shallow foundation _constructional details of :spreadfoundation for walls, thumb rules for depth and width of foundation and thickness of concrete block		
06			OCT	01/10/22		
07	03	OCT	10/10/22	Walls & Masonry Works : 3.1 Purpose of walls 3.2 Classification of walls – load bearing, non-load bearing walls, retaining walls.	06	07

08		11/10/22	3.3 Classification of walls as per materials of construction: brick, stone, reinforced brick, reinforced concrete, precast, hollow and solid concrete block and composite masonry walls (Concept Only)		
09		15/10/22	3.4 Partition Walls : Suitability and uses of brick and wooden partition walls 3.5 Brick masonry : Definition of different terms		
10		17/10/22	3.5 Brick masonry :definition of different term		
11		18/10/22	3.6 Bond – meaning and necessity: English bond for 1and 1-1/2 Brick thick walls. T, X and right angled corner junctions. Thickness for 1and 1-1/2 brick square pillars in English bond		
12		22/10/22	3.7 Stone Masonry		
13		24/10/22	3.8 Glossary of terms –String course, corbel, cornice, block-in-course, grouting, mouldings, templates, throating, through stones, parapet, coping, pilaster and buttres		
14	04	25/10/22	Doors, Windows And Lintels 4.1Glossary of terms used in doors and windows	04	03
15		29/10/22	4.2 Doors – different types of doors 4.3 Windows – different types of windows		
16	NOV	01/11/22	4.4 Purpose of use of arches and lintels		
17		05/11/22	Floors, Roofs and Stairs 5.1 Floors: Glossary of terms ,Types of floor finishes – cast-in-situ, concrete flooring(monolithic, bonded), only	05	07
18		07/11/22	terrazzo tile flooring, cast in situ Terrazzo flooring ,timber flooring (Concept		
19		08/11/22	5.2 Roofs: Glossary of terms, Types of roofs, concept and function of flat, pitched, hipped and Sloped roofs		
20		12/11/22	5.3 Stairs: Glossary of terms; Stair case, winder, landing, stringer, newel, baluster, rise ,tread, width of stair case, hand rail, nosing, head room, mumty room.		

21	CH:3	NOV	21/11/22	5.4 Various types of stair case – straight flight, dog legged, open well, quarter turn,				
22			22/11/22	Half turn (newel and geometrical stairs), bifurcated stair, spiral stair, cantilever stair, tread riser stair				
23			26/11/22	continue				
24		DEC	28/11/22	Protective, Decorative Finishes, Damp and Termite Proofing 6.1 Plastering – purpose – Types of plastering, Types of plaster finishes – Grit finish,	05	07		
25			29/11/22	rough cast, smooth cast, sand faced, pebble dash, acoustic plastering and plain plaster etc.				
26			3/12/22	6.2 Proportion of mortars used for different plasters, preparation of mortars, techniques of plastering and curing				
27			5/12/22	6.3 Pointing – purpose – Types of pointing				
28			6/12/22	6.4 pointing – objectives- method of pointing new and old wall surface ,wood surface metal surfaces – powder coating and spray painting on metal surfaces.				
29			10/12/22	6.5 White washing – Colour washing – Distempering – internal and external walls				
30			12/12/22	6.6 Damp and Termite proofing – Materials and Methods				
31			13/12/22	Green building Energy management and Energy building ,and project  7.1 concept of green building, 7.2 introduction to energy management & energy audit of building			04	02
32			17/12/22	7.3 Aims of energy management building  7.4 types of energy audit response energy audit question  7.5 energy surveying and audit report				