

# BLACK DIAMOND SCHOOL OF ENGINEERING, JHARSUGUDA



## LESSON PLAN

Session (2022-2023)

<b>Discipline : CIVIL ENGINEERING</b>	<b>Semester:3<sup>rd</sup> Sem,winter/2022</b>	<b>Name of the Teaching Faculty: Ms. S.J.Rosy Tirkey</b>
Subject:BUILDING MATERIALS AND CONSTRUCTION TECHNOLOGY(Th.3)	No. Of Days/Week Class Allotted :05	Start Date :14/09/22 End Date:21/01/23
<b>Week</b>	<b>Class Day</b>	<b>Theory Topics</b>
1st	1st	Classification of rock
	2nd	Uses of stone
	3rd	Natural bed of stone and dressing of stone
	4th	Characteristic of different types of stone and their uses
	5th	Brick earth and its composition
2nd	1st	Brick making and preparation of brick earth
	2nd	Classification of bricks
	3rd	Manufacturing process of brick
	4th	Classification of bricks
	5th	Qualities of good building bricks
3rd	1st	Cement and types of cement
	2nd	Properties of cement
	3rd	Manufacturing of cement
	4th	Importance and application of blended cement
	5th	Mortar and types of mortar
4th	1 <sup>st</sup>	Sources and classification of sand
	2 <sup>nd</sup>	Buckling of sand
	3 <sup>rd</sup>	Use of gravel ,morrum and fly ash
	4 <sup>th</sup>	Definition and composition of concrete
	5 <sup>th</sup>	Water cement ratio, workability
5th	1 <sup>st</sup>	Properties and grading of aggregate

	2 <sup>nd</sup>	Class test
	3 <sup>rd</sup>	Mixing placing ,compacting and curing of concrete
	4 <sup>th</sup>	Revision
	5 <sup>th</sup>	Timber and its classification
6 <sup>th</sup>	1 <sup>st</sup>	Importance and seasoning of timber
	2 <sup>nd</sup>	Quiz test
	3 <sup>rd</sup>	Characteristics of good timber
	4 <sup>th</sup>	Clay products and refractory materials
	5 <sup>th</sup>	Uses of cast iron, wrought iron, mild steel
7 <sup>th</sup>	1 <sup>st</sup>	Surface protective materials
	2 <sup>nd</sup>	Composition of paints ,enamels, varnishes
	3 <sup>rd</sup>	Types and uses of surface protective material
	4 <sup>th</sup>	Varnishes and distempering
	5 <sup>th</sup>	Building and classification of building
8 <sup>th</sup>	1 <sup>st</sup>	Different components of building
	2 <sup>nd</sup>	Site investigation
	3 <sup>rd</sup>	Previous year question discussion
	4 <sup>th</sup>	Concept of foundation and its purpose
	5 <sup>th</sup>	Types of foundation
9 <sup>th</sup>	1 <sup>st</sup>	Different types of shallow foundation
	2 <sup>nd</sup>	Wall and purpose of wall
	3 <sup>rd</sup>	Classification of walls
	4 <sup>th</sup>	Brick masonry
	5 <sup>th</sup>	Technical terms used in brick masonry
10 <sup>th</sup>	1 <sup>st</sup>	Stone masonry
	2 <sup>nd</sup>	Glossary of terms used in stone masonry
	3 <sup>rd</sup>	Doors windows and lintels
	4 <sup>th</sup>	Glossary of terms used related to door, window
	5 <sup>th</sup>	Different types of doors
11 <sup>th</sup>	1 <sup>st</sup>	Different types of windows
	2 <sup>nd</sup>	Purpose and uses of lintel and arches
	3 <sup>rd</sup>	Floors, roofs and staircase
	4 <sup>th</sup>	Terms used in floors
	5 <sup>th</sup>	Terms used in roof.

12th	1 <sup>st</sup>	Types of floor
	2 <sup>nd</sup>	Types of roof
	3 <sup>rd</sup>	Terms used in staircase
	4 <sup>th</sup>	Types of staircase
	5 <sup>th</sup>	Plastering and types of plastering
13th	1 <sup>st</sup>	Types of plaster finishes
	2 <sup>nd</sup>	Purpose of plastering
	3 <sup>rd</sup>	Pointing ,types of pointing
	4 <sup>th</sup>	white washing ,colour washing,distemping
	5 <sup>th</sup>	Methods of painting
14th	1 <sup>st</sup>	Damp proofing methods and materials
	2 <sup>nd</sup>	Termite proofing methods
	3 <sup>rd</sup>	Class test
	4 <sup>th</sup>	Introduction to green building and energy management
	5 <sup>th</sup>	Types of energy audit
15th	1 <sup>st</sup>	Energy surveying and audit report
	2 <sup>nd</sup>	Quiz test
	3 <sup>rd</sup>	Revision
	4 <sup>th</sup>	Revision
	5 <sup>th</sup>	Previous year question discussion