

LESSONPLAN (6th Sem Ceramic)

CEMENT TECHNOLOGY

Sl no	Topic	Reference	Assignment	Comment/ period
1.0	LIME AND OTHER HYDRAULIC MATERIALS	S N Ghosh		
1.1	Define various terms related to lime and lime stone	S N Ghosh	YES	1Period
1.2	State & explain properties of lime stone	S N Ghosh	YES	2Period
1.3	Impurities of lime stone and its effect in cements.	S N Ghosh	YES	2Period
1.4	Pozzolanic materials & its utilization in cement.	S N Ghosh	NO	2Period
1.5	Fly ash and slag for cement making	S N Ghosh	NO	2Period
2.0	PORTLAND CEMENT : Discuss the following details	S N Ghosh		
2.1	Introduction to OPC	S N Ghosh	YES	1Period
2.2	Raw Materials for OPC, Their properties and effect on cement making.	S N Ghosh	YES	2Period
2.3	Manufacturing Process of OPC	S N Ghosh	NO	2Period
2.4	Rotary Kiln and its operation (RK)	S N Ghosh	YES	2Period
2.5	Vertical shaft kiln and its operation for OPC.	S N Ghosh	YES	2Period
2.6	Clinker formations and clinker chemistry	S N Ghosh	YES	
2.7	Hydration of cement & Setting of Cement.	S N Ghosh	NO	2Period
2.8	Effect of acid water and sulphate water on cement	S N Ghosh	NO	1Period
2.9	Effect of alkalis compound on OPC.	S N Ghosh	YES	1Period
2.10	Various types of Accelerator and retarders used in cement.	S N Ghosh	NO	1Period
2.11	Properties of cement, 43 grade and 53 grade OPC	S N Ghosh	NO	1Period
2.12	Constituents of cement clinker, grinding of clinker	S N Ghosh	YES	2Period
2.13	Storage of cement	S N Ghosh	YES	2Period
2.14	Impurities in cement and their effect.	S N Ghosh	YES	2Period
3.0	VARIOUS TYPES OF CEMENT:	S N Ghosh	YES	
3.1	Pozzolana Cement	S N Ghosh	YES	1Period
3.2	Blast Furnace slag cement	S N Ghosh	YES	1Period
3.3	Acid Resistant Cement	S N Ghosh	YES	2Period
3.4	Masonry Cement	S N Ghosh	YES	1Period
3.5	Sulphate Resisting and Super Sulphate Cement	S N Ghosh	YES	2Period
3.6	Rapid Hardening Cement	S N Ghosh	YES	1Period

3.7	Quick Setting Cement	S N Ghosh	YES	4Period
3.8	High alumina Cement	S N Ghosh	YES	2Period
3.9	White Cement	S N Ghosh	YES	2Period
3.10	Coloured Cement	S N Ghosh	YES	2Period
3.11	Oil well cement	S N Ghosh	YES	2Period
3.12	Sorel cement.	S N Ghosh	YES	1Period
3.13	Hydrophobic cement	S N Ghosh	YES	1Period
3.14	Expanding Cement.	S N Ghosh	YES	2Period
3.15	Low expansion cement	S N Ghosh	YES	1Period
4.0	TESTING OF CEMENT :	S N Ghosh	YES	2Period
4.1	Consistency of cement	S N Ghosh	YES	1Period
4.2	Initial and Final setting of Cement.	S N Ghosh	YES	2Period
4.3	Expansion of Cement	S N Ghosh	YES	1Period
4.4	Compressive & Tensile Strength.	S N Ghosh	YES	1Period
4.5	Fine ness of cement	S N Ghosh	YES	2Period
4.6	Impurities in Cement	S N Ghosh	YES	1Period
4.7	Specific gravity of cement.	S N Ghosh	YES	1Period
4.8	Chemical analysis of cement.	S N Ghosh	YES	2Period
5.0	CEMENT CONCRETE PRODUCTS :	S N Ghosh	YES	
5.1	Describe various cement concrete products used in low cost housing	S N Ghosh	YES	1Period
5.2	Explain various types of ferro-cement products.	S N Ghosh	YES	2Period
5.3	Describe making of mosaic tiles.	S N Ghosh	YES	1Period
5.4	Describe making of cement concrete (RCC) pipes & Railway slipper.	S N Ghosh	YES	1Period
5.5	Describe making of cement concrete Block	S N Ghosh	YES	1Period
5.6	Making of FAL-G Brick	S N Ghosh	YES	1Period
6.0	HIGH ALUMINA CEMENT	S N Ghosh	YES	
6.1	Introduction	S N Ghosh	YES	2Period
6.2	Raw materials used for manufacturing of HAC.	S N Ghosh	YES	1Period
6.3	Manufacturing process	S N Ghosh	YES	1Period
6.4	Hydration Chemistry & properties of high alumina cement	S N Ghosh	YES	1Period
6.5	Use of high alumina cement in refractory & other areas.	S N Ghosh	YES	2Period