

LESSON PLAN

Name of the Faculty		Rohit Sharma		
Discipline		Civil Engineering		
Semester		5th		
Subject		Estimation & Costing		
Lesson Plan Duration		From August 2026 to Nov. 2026		
WEEK	LECTURE DAY	THEORY		PRACTICAL
		TOPIC	TOPIC	
1	1	Introduction to quantity surveying and its importance. Duties of quantity surveyor	1	Preparation of Detailed and Abstract Estimates from Drawings by following (CSR& HSR) rates for, A small residential building with a flat roof comprising of two rooms with W.C., bath, kitchen and verandah
	2	Types of estimates . Preliminary estimates: - Plinth area estimate and Cubic content estimate	2	Earthwork for unlined channel
2	3	Detailed estimates: - Concept, difference between preliminary and detailed estimate, Stages of preparation – details of measurement and calculation of quantities and abstract	3	WBM road and pre-mix carpeting
	4	Measurement - Units of measurement for various items of work as per BIS: 1200. Rules for measurements	4	Revision
3	5	Different methods of taking out quantities – centre line method and long wall and short wall method, Analysis of Rates Steps involved in the analysis of rates. Requirement of material, labour, sundries, contractor's profit and overheads	5	Single span RCC slab culvert
	6	Analysis of rates for finished items when data regarding labour, rates of material and labour is given: a) Earthwork in excavation in hard/ordinary soil and filling b) Concept of lead and lift c) RCC in roof slab/beam/lintels/columns,	6	Earthwork for plain and hill roads
4	7	Brick masonry in cement mortar Cement Plaster, White washing, painting	7	RCC work in beams, slab, column and lintel, foundations
	8	Contractor ship- Meaning of contract. Essentials of a contract Various Conditions of contractors	8	10 users septic tank
	9	Types of contracts, their advantages, disadvantages and suitability, system of payment	9	Calculation of quantities of materials for 2.1 Cement mortars of different proportion

5	10	Single and two cover-bids; tender, tender forms and documents, tender notice, submission of tender and deposit of earnest money,	10	Cement concrete of different proportion
6	11	security deposit, retention money, maintenance period	11	Revision
	12	Classification and types of contracting firms/construction companies	12	Brick/stone masonry in cement mortar of different proportion
7	13	Introduction to CSR, HSR and calculation of cost based on premium on CSR & HSR	13	Revision
	14	Preparation of Tender Document based on common schedule rates and Haryana schedule rates (CSR & HSR) 4.3 Various Condition of contractors	14	Plastering, pointing and painting
8	15	Exercises on writing detailed specifications of different types of building works from excavation to foundations,	15	Revision
	16	superstructure and finishing operation, valuation	16	D.P.C. and flooring
9	17	Revision	17	Exercises on preparing tender documents for the following - Earth work
	18	Purpose of valuation, principles of valuation	18	Revision
10	19	Definition of various terms related to valuation like depreciation	19	Construction of a small house as per given drawing
	20	Revision	20	Revision
11	21	sinking fund, salvage and scrap value, market value, fair rent, year's purchase etc	21	RCC works
	22	Revision	22	Pointing, plastering and flooring
12	23	Methods of valuation (i) replacement cost method	23	Revision
	24	Revision	24	White-washing, distempering and painting
13	25	rental return method	25	Wood work including polishing
	26	Preparation of comparative statement for item rate contract	26	Revision
14	27	Revision	27	Sanitary and water supply installations
	28	Revision	28	Revision
15	29	Revision	29	False ceiling, aluminum (glazed) partitioning
	30	Revision	30	Revision
16	31	Revision	31	Tile flooring including base course
	32	Revision	32	Revision