

Week	Lab	Content
1	1	Module-I: Principles of Estimation - Discussion of theoretical concepts: Introduction to estimation, different kinds of estimates, units, and lump sum items. - Submission Task: Begin with a simple estimation exercise for a single-room building plan.
2	2	Module-I: Estimation of Building Elements - Discussion on different methods of estimation - Submission Task: Estimate quantities of materials for the foundation and walls of a single-room building.
3	3	Module-I: Estimation of Building Finishes - Discussion on estimating quantities for R.B. and R.C.C. works, plastering, whitewashing, and painting.- Submission Task: For a two-room building plan, estimate the quantities for plastering, white-washing, and painting.
4	4	Module-II: Introduction to Specifications - Discussion of theoretical concepts: Necessity and types of specifications, with a focus on general specifications for materials like bricks, cement, sand, and water. Submission Task: Prepare general specifications for the major materials to be used in the two-room building plan.
5	5	Module-II: Detailed Specifications for Civil Works - Discussion on detailed specifications for Earthwork, Cement, concrete, and brick work. Submission Task: Write a detailed specification document for the brickwork and concrete works in the two-room building from previous weeks.
6	6	Module-II: Detailed Specifications for Finishes - Discussion on detailed specifications for floorings, D.P.C., R.C.C., cement plastering, and painting. Submission Task: Complete the detailed specifications for the remaining items of the building, including flooring and plastering.
7	7	Viva-Voce 1
8	8	Module-III: Introduction to Valuation - Discussion of theoretical concepts: Different terms used, the role of a valuer, and the purpose and necessity of valuation. Define Capitalized Value and Years purchase. Submission Task: Calculate the capitalized value for a given property with a specified net income.
9	9	Module-III: Depreciation and Sinking Fund - Discussion on concepts of sinking fund, depreciation, and types of values. Submission Task: Calculate the depreciation and sinking fund for a civil engineering structure using a provided formula.
10	10	Module-III: Methods of Valuation - Discussion on different methods of valuation for open plots and open plots with existing residential and commercial structures. Use of valuation tables and formulae. Submission Task: Perform a full valuation for a hypothetical open plot with an existing residential structure.
11	11	Module-IV: Rate Analysis - Discussion of theoretical concepts: Purpose, importance, and requirements of rate analysis. Units of measurement. Submission Task: Prepare a detailed rate analysis for earthwork and concrete works, including labor, material, and machinery costs.
12	12	Module-IV: Advanced Rate Analysis - Discussion on the procedure of rate analysis for R.C.C. works, reinforced brick work, and finishing works (plastering, painting). Submission Task: Complete a detailed rate analysis for a few complex items from your estimations in previous weeks.
13	13	Module-IV: Public Works Accounts & Contracts - Discussion on Public Works Accounts, contract guidelines, types of contracts, Tender and acceptance of tender, and bill preparation. Submission Task: Prepare a comprehensive tender document for the two-room building project, combining all your previous work on estimation, specifications, and rate analysis.
14	14	Viva-Voce 2
15	15	Final Project Submission & Review - Final review of the complete project, which includes all submissions from the course. Submission Task: Finalize and submit the complete project for evaluation.