

CE/BOS/CE 401/0210

K L UNIVERSITY

PROJECT ESTIMATION AND CONTRACTS (09 – CE 401)

SYLLABUS

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UNIT – 1 Procedure of Estimating

Methods of estimating; Main items of work; Deduction for openings; Degree of accuracy.

Methods of Building Estimates: Individual wall method; Centre line method; Arch masonry calculation;

UNIT – 2 Estimate of RCC works

Estimate of RCC slab; RCC beam; RCC T-beam slab and RCC column with foundation.

Road Estimating: Estimate of earthwork; Estimate of pitching of slopes; Estimate of earthwork of road from longitudinal sections; Estimate of earthwork in hill roads

Canal Estimate: Earthwork in canals–different cases; Breached sections/Breach closures

UNIT – 3 Specifications

Purpose and method of writing specifications; Detailed Specifications for Brick work; R.C.C; Plastering; Mosaic Flooring; R.R.Stone Masonary.

ANALYSIS OF RATES: Preparing analysis of rates for the following items of work: i) Concrete ii) RCC Works iii) Brick work in foundation and super structure iv) Plastering
preparing lead statements

UNIT – 4 PWD accounts and procedure of works: Organization of Engineering department; Work charged establishment; Contract; Tender; Tender notice; Tender Schedule; Earnest money; Security money; Measurement book; Administrative approval; Technical sanction; Plinth area; Floor Area; Carpet area; Approximate Estimate; Plinth area estimate; Revised Estimate; Supplementary estimate. Annual budgets of work, cash flow allocations yearly, TF Accounts of Materials USR

Valuation: Cost; Price & value; Methods of valuation; Out goings; Depreciation; Methods for estimating cost depreciation; Valuation of building

UNIT – 5 Contracts

Contract: types of contracts, Contract Law, EMD, Tenders, Acceptance of Contract, Branch of Contract, Cancellation of Contract, Re-tendering – work order, running payment, Final Bill, Deviations orders, Completion Certificate.

TEXT BOOKS:

3. Estimating & Costing in Civil Engineering by B.N. Dutta; U. B. S. Publishers & Distributors, New Delhi.
4. Valuation of Real properties by S. C. Rangwala; Charotar Publishing House, Anand.

REFERENCE BOOKS:

1. Estimating & Costing by M. Chakraborty, S Chand Publishing House.