

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA IN CIVIL ENGINEERING
SEMESTER: V

Subject Name: **Quantity Survey and Valuation**

Sr. No.	Course content	Hours 28
1	<p>Introduction: (Considering Residential Building)</p> <p>1.1 Meaning & objectives of estimating & costing. 1.2 Skills required for a good estimator. 1.3 Interpretation of drawing.</p>	01
2	<p>Mode of measurement : (Considering Residential Building)</p> <p>2.1 Purpose, accuracy, units, Rules. 2.2 Mode of measurements for content related items (as per I.S.)</p>	01
3	<p>Specifications: (Considering Residential Building)</p> <p>3.1 Definition, purpose & importance of specifications 3.2 Types of specifications 3.3 Design and drafting of specifications 3.4 Specification writing for some useful items viz. Brick masonry, Excavation, Concrete etc.</p>	02
4	<p>Rate Analysis: (Considering Residential Building)</p> <p>4.1 Definitions, importance, purpose & factors affecting the rate analysis. 4.2 Task work, Rate of materials and Labours, water charges etc. 4.3 Rate analysis of important items from excavation to completion of work of Civil Engineering Structure. (also use Computer software). 4.5 Rate analysis of the special items such as carving works, Anti-termite treatment, etc. 4.6 Study of S.O.R. and market rates.</p>	02
5	<p>Estimating : (Considering Residential Building)</p> <p>5.1 Types of estimates, purpose. 5.2 Methods of computing the quantities (i) Centerline method (ii) Long wall and short wall method</p> <p>5.3 Detailed estimate of : (i) Compound wall (ii) Two room up to plinth (ii) Single storey and two- storey (G+1) residential building,</p>	12

	<p>5.4 Detail estimate of RCC (i) Beam, column with footing , slab , weather shed</p> <p>5.5 RCC retaining wall.</p>	
6	<p>Valuation:</p> <p>6.1 Define terms : Cost, Price, Value, Real estate , Personal estate</p> <p>6.2 Objects of valuation</p> <p>6.3 Mortgage, freehold property, lease-hold property</p> <p>6.4 Property income, gross income, net income, outgoing</p> <p>6.5 Depreciation and obsolescence</p> <p>6.6 Explain: Market value, book value, distress value, monopoly value, scrap value, salvage value, accommodation value, replacement value, sentimental value, speculative value.</p> <p>6.7 Factors affecting the value of a property.</p> <p>6.8 Characteristics of good valuer .</p> <p>6.9 Sinking fund : its computation and application</p> <p>6.10 Valuation table and their use.</p> <p>6.10.1 Table 1 Fixed Deposit Formula (amount accumulated at compound interest “i” after “n” years. $A = (1 + i)^n$</p> <p>6.10.2 Table 2 Present value of Rs. 1 after n nos of years $A = (1+i)^{n-1}$</p> <p>6.10.3 Table 3 Coefficient of Sinking Fund $S = [i / (1+i)^{n-1}]$</p> <p>6.11 Valuation methods for property & land.</p> <p>(i) Rental Method</p> <p>(ii) Land and Building Method</p> <p>(iii) Profit and Loss Method</p> <p>(iv) Developmental Method</p> <p>6.12 Installments for repayment of loan.</p> <p>6.13 Valuation report- case study</p> <p>6.14 Types of rent</p> <p>6.15 Procedure of fixing standard rent</p>	10

References Books:

1. I.S 1200 Part I to XXV (Revised) B.I.S. Publication
2. Estimating & Costing in Civil Engg. B.N. Dutta
3. Estimating & Costing (Civil Engg.) S.C.Rangwala
4. Estimating & Costing M.C.Chakraborty
5. A text book of Estimating & Costing G.S.Birdie
6. Estimating & Costing Vazirani & Chandola
7. Theory & Practice of Valuation Roshan H. Namavati
8. Valuation of Real properties Roshan H. Namavati
9. Valuation of Real properties S.C.Rangwala