

**OBJECTIVES:**

To inform to students the need and importance of specification, how to write specification – important aspects of the design of a specification.

**UNIT I SPECIFICATION**

Necessity of specification, importance of specification, - How to write specification, - Types of Specification, -Principles of Specification writing, - Important aspects of the design of specification  
– sources of information – Classification of Specification.

**UNIT II SPECIFICATION WRITING 10**

Brief Specification for 1<sup>st</sup> class, 2<sup>nd</sup> class , 3<sup>rd</sup> class building. Detailed specification for earthwork excavation, plain cement concrete, Reinforced concrete, first class and second class brickwork, Damp proof course, ceramic tiles/marble flooring and dado, woodwork for doors, windows frames and shutters, cement plastering, painting & weathering course in terrace.

**UNIT III ESTIMATION 10**

Types & purpose, Approximate estimate of buildings – Bill of quality, factors to be considered, - principles of measurement and billing, contingencies, measurement of basic materials like brick, wood, concrete and unit of measurement for various items of work – abstract of an estimate.

**UNIT IV DETAILED ESTIMATE 10**

Deriving detailed quantity estimates for various items of work of a building. Like earthwork excavation, brick work, plain cement concrete, Reinforced cement concrete works, wood work, iron works, plastering, painting, flooring, weathering course for a single storied building.

**UNIT V CURRENT TRENDS 8**

Methods of contracting and its link to specification drafting - the Business Environment and the structure in practice. Valuation, depreciation and its implications – case studies.

**OUTCOMES**

Students learn the art of building construction through specification writing. Students learn to work out the approximate estimate, detailed estimate for small scale building projects and low cost housing

**REQUIRED READING**

- S.C. Rangwala, “Estimating, Costing and Valuation(Professional practice)”, 1984
- B.W. Dutta, “Estimating & Costing” (Revised by S. Dutta), UBS Publishers Distribution P.Ltd. India, 1983
- M. Chakraborti, “Estimating Costing and Specification”, 1984

Gurcharan singh & Jagdish singh, "Estimating Costing and Valuation", Standard Publishers Distributors, 2012

**REFERENCES**

T.N. Building practice, Vol:1 Civil Govt Publication.  
PWD Standard Specifications. Govt Publication, 2012.