

GUJARAT TECHNOLOGICAL UNIVERSITY
SPECIFICATIONS, ESTIMATION AND VALUATION
SUBJECT CODE: 1025503
B.PLAN 2ND SEMESTER

Prerequisite: NA

Rationale: To study Specifications, Estimations and Valuation of Development Works.

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	Field work (T)	P	C	Theory Marks		Practical Marks		
				ESE(E)	PA (M)	PA (V)	PA(I)	
2	1	0	3	50	50	30	20	150

L- Lectures; T- Tutorial/Teacher Guided Student Activity/Field work; P- Practical; C- Credit; ESE- End Semester Examination; PA- Progressive Assessment.

Content:

Sr. No.	Content	Total Hrs	% Weightage
1	Introduction: Why the knowledge of quantity surveying and specifications is necessary for planners? Significance and methods of writing specifications, classifications of specifications, sources of specifications; Types and methods of cost estimation for different types of projects, rates and sources of rates for different components of planning projects; Cost Index.	9	18.75%
2	General Specifications : General specifications for common building materials and building trades, earthwork, structure (framing), flooring, stonework, plasters, waterproofing of basements and terraces, roofing, doors and windows, elevators.	6	12.5%
3	Detailed Specifications: Site development and earth works; Water supply network and distribution systems; Sewer systems; Electrical and telephone networks; Landscaping, roads, pathways, boundary wall, pools, lighting.	9	18.75%
4	Estimation: Cost estimation and determination of rates for different types of housing; Cost estimation and determination of rates of works involved in the infrastructure services (roads, water supply, sewer systems, etc.); Costing procedure for different land use	12	25%

	categories, development works, interest on investment, and phasing; Preparation of detailed Development Costs of a Planning Schemes for an approximate population of 5,000 as per Norms and standards.		
5	Valuation :Value and purpose of valuation; Definition and importance of valuation of land and buildings; Factors affecting property and land value at a city and clarity level; Legal, fiscal and administrative measures of land value; Betterment; Scrap value, salvage value, outgoings; Capitalized value of buildings; appreciation, methods of calculating depreciation.	12	25%

Suggested Specification table with Marks (Theory):

Distribution of Theory Marks				
R Level	U Level	A Level	N Level	E Level
20	40	20	10	10

Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate and above Levels (Revised Bloom's Taxonomy)

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Reference Books:

1. Estimation and Costing and Valuation by B.N. Dutta, Sagam Books & Edition- Second.
2. Specification:A Practical System of Writing Specifications by W. Frank Bower, Hand press Publishing & Edition-2012.
3. Estimation,Costing, Specification in Civil Engineering by M. Chakraborti, M. Chakraborti& Edition-2010.
4. Quantity Survey by P.K. Gupta, Khanna Publisher & Edition-2008.

Course Outcome:

After learning the course the students should be able to:

1. To learn the Methods of Estimation of Cost for Development.
2. To learn the Types of Specifications for any Project and its associated Impact on Development.

List of Exercises / Practical:

1. Visit to CPWD or PWD or Public Health Engineering Department and submit Report.

List of Assignments/Tests :

1. Test on Unit 1 and Unit 2.
2. Assignment on Unit 4 or Unit 5.

List of Open Source Software/learning website: NA