

Devi Ahilya University Indore, India Institute of Engineering & Technology				III Year B.E. (Civil Engineering) (Full Time)			
Subject Code and Name	Instruction Hours Per Week			Credits			
5VLRC3: Quantity Surveying & Costing	L	T	P	L	T	P	Total
	3	1	2	3	1	1	5
Duration of Theory Paper: 3 hours							

Course Objectives:

The course is designed

1. To understand the fundamentals of estimation and specification
2. To provide exposure to rate analysis
3. To provide hands on experience on estimation
4. To study the fundamentals of valuation
5. To carry out valuation by different methods

COURSE CONTENTS

Unit I: Introduction:

Purpose and importance of estimates, principles of estimating. Mode of measurement, measurement sheet and abstract sheet; bill of quantities. Types of estimate, plinth area rate, cubical content rate, preliminary, original, revised and supplementary estimates for different projects. Study of various drawing attached with estimates

Unit II: Rate Analysis:

Importance, Task for average artisan, various factors involved in the rate of an item, material, and labour requirement for different items of work; analysis of Rates for important items of work. Current schedule of rates. (C.S.R.)

Unit III: Detailed Estimates:

Methods of taking out quantities of items of work. Long wall and Short wall method, Centre line method, preparing detailed estimates of various types of buildings, Detailed Estimate of RCC beam, slab, Column, and preparation of bar bending schedule.

Unit IV: Earthwork Calculations Different methods of calculation of quantity of earthwork for road, canal, culverts etc. Capacity of Reservoir from the contours, Estimating of culverts, Services for building such as water supply, drainage and electrification.

