

# PARALA MAHARAJA ENGINEERING COLLEGE, BERHAMPUR

## LESSON PLAN

**Subject- Quantity Surveying and Estimating (4-0-0)**

**Semester- 5<sup>th</sup> sem**

**Branch/Course- Civil engineering/B.Tech**

Lecture No	Module	Topics to be delivered	Remarks/Sign of Faculty Member
1	I	Quality estimation: Principles of estimation, methods and units,	
2	I	Estimation of materials in buildings	
3 to 6	I	Problems on material estimation for various types of building	
7 to 10	I	Estimation of materials in culverts and bridges problems	
11	II	Principles of general specification for various types building works.	
12	II	Principles of detailed specification for various types building works.	
13	II	Analysis of rates, description, Prime cost, Schedule rates,	
14 to 17	II	Analysis of rates for various types of works (problems)	
18	II	Estimate of R.C.C. and Steel works, Scheduling, Slab, beam, column	
19	III	Estimation of Road - earthwork	
20	III	Problems for earthwork fully in banking, cutting	
21	III	Problems for earthwork partly cutting & partly filling	
22	III	Valuation, rent fixation, tenders, contracts.	
23	III	accounting procedure, measurement book, stores, cost & quality control, PWD & CPWD practice, Software Applications for Estimation Buildings	
24 to 26	IV	Network techniques	
27 to 28	IV	Introduction to CPM /PERT methods	
28 to 30	IV	Introduction to CPM /PERT methods	
31 to 33	IV	Their use in project planning construction schedules for jobs, materials equipments, labour and finance.	

Course Outcome (CO)	Descriptions (At the end of the semester students will be able to)
CO1	Develop different types of estimates in specified structures.
CO2	Define various types of specification.
CO3	Take part in rate analysis for bill preparation of engineering projects.
CO4	Apply network techniques in project planning.