## Week Theory **Topic Covered Date and** Remarks Lecture Topic (Including Assignment/Test) Date HOD Director-Day principal 1. Quantity Surveying and Cost Estimation: Definitions, objectives $1^{st}$ 2. role and functions of quantity surveyor 3. Pre- tender survey, Quantity measurements, 4. Bill of quantities, analysis of rates for different items of work. $2^{nd}$ 5. Specifications. General and detailed specifications for different items of work. 6. Estimates and budgets types and theirpreparation 7. Estimate of Buildings, Roads, Building Bye Laws, Taking-off 3rd quantities, 8. Methods of measurement, e- tendering, Bill of quantities. 9. Contracts: Definition, need, importance 10. types of contracts and their characteristics, $4^{\text{th}}$ 11. procedure for tendering and contracts, 12. evaluation and examination of tenders, award of work, 13. Joint Ventures, Concession Agreements. 5<sup>th</sup> Valuation, its types, Determination of value of a property 14. Calculation of standard rent. 15. Definitions, functions, characteristics of project, planning and principles of Planning 16. 6<sup>th</sup> and Management. Definitions, functions, characteristics of project, planning and principles of Planning 17. and Management. 18. Network Techniques: Bar milestone charts 7<sup>th</sup> -----Ist Minor Test-----19. Planning and scheduling of PERT / CPM, Time cost optimization, 8<sup>th</sup> 20. Probability concepts Allocation of resources and resource levelling, 21. Time cost optimization, Probability concepts Allocation of resources and resource levelling,. Updating, controlling and monitoring, 22. Work Breakdown Schedule (WBS). Updating, controlling and 9<sup>th</sup> monitoring, Work Breakdown Schedule (WBS). 23 Material& Equipment Management: Importance, scope, 24. objectives and functions 25. identification of source and vendor analysis, $10^{\text{th}}$ 26. identification of source and vendor analysis 27. purchase, procurement procedure, inventory control 28. purchase, procurement procedure, inventory control, $11^{th}$ 29. EOQ analysis 30. Importance, need, functionsand principles of equipment management, 31. types of equipment and their uses, $12^{th}$ 32. Selection planning and matching of construction plant and equipment. 33. Selection planning and matching of construction plant and equipment. 13<sup>th</sup> Account Procedure of PWD Works: Classification of Works, 34. Account Procedure of PWD Works: Classification of Works, 35. 36. Muster Roll, and Deposit works. Indent, Tools and Plants $14^{\text{th}}$ -----2<sup>nd</sup> Minor Test-----37. Cash Book, Imprest $15^{\text{th}}$ 38. temporary Advance, Stores, Indent, Tools and Plants 39.

## Subject: Construction Management (PEC-CVE453-T)