PROJECT PLANNING & MANAGEMENT(CVE-430-L)

Name of the Faculty: Mr. Harish Kumar

Discipline:B. Tech in Civil Engineering VIII (4th Year)

Semester:8th

Subject:CVE – 430-L, Project Planning & Management

Lesson Plan Duration:15 Weeks

Work Load (Lecture / Practical) per week (in hrs.): Lectures – 03

Week	LectureDay	Syllabus
1st	1	**Construction Management:** Significance, objectives andfunctions of constructionmanagement
	2	Typesofconstructions,resourcesforconstructionindustry,stagesforconstruction
	3	Constructionteam,engineeringdrawings.
2nd	4	**ConstructionContracts&Specifications:**Introduction,typesofcontracts,contractdocument
	5	Specifications,importantconditionsofcontract,arbitration
	6	**ConstructionPlanning:**Introduction, workbreakdown structure, stagesinplanning-pre-tenderstages
3rd	7	contractstage,scheduling,schedulingbybarcharts,
	8	contractstage,scheduling,schedulingbybar charts,
	9	preparationofmaterial,equipment,labourand finance schedule,Limitationof barcharts,milestonecharts
4th	10	**ConstructionOrganization:**PrinciplesofOrganization,communication,
	11	Leadershipandhumanrelations,typesofOrganizations,
	12	Organizationforconstructionfirm,siteorganization,Temporaryservices,joblayout.
5th	13	**NetworkTechniquesinConstructionManagement-I:CPM** Introduction,networktechniques,workbreakdown,
	14	classificationofactivities,rulesfordevelopingnetworks,
	15	network development-logic of network, allocation of time to various activities,NumericalProblems
6th	16	NumericalProblems
	17	NumericalProblems
	18	Fulkerson'srulefornumberingevents,networkanalysis,
7th	19	**MINORTESTI**
	20	
	21	
8th	22	determinationofprojectschedules,criticalpath,
	23	ladderconstruction,floatinactivities,
	24	sharedfloat,updating,resourcesallocation,Resourcessmoothingandresourcesleveling.
9th	25	Numerical Problems
	26	Numerical Problems
	27	Network Techniques in Construction Management-II-PERT: Probability concept in network, optimistic time, pessimistic time, most likely time,
10th	28	Numerical Problems
	29	Numerical Problems
	30	lapsed time, deviation, variance, standard deviation, Numerical Problems
11th	31	slack critical path, probability of achieving completion time,
	32	central limit theorem, Numerical Problems
	33	Numerical Problems
12th	34	Numerical Problems
	35	Cost-Time Analysis: Cost versus time, direct cost, indirect cost, total project cost and optimum duration,
	36	Cost versus time, direct cost, indirect cost, total project cost and optimum duration,
13th	37	Contracting the network for cost optimization,
	38	steps in time cost optimization, illustrative examples.
	39	illustrative examples
14th	40	**MINORTESTII**
	41	
	42	
15th	43	**Inspection&QualityControl:**Introduction,principlesofinspection,reinforcementofspecifications,
	44	Stagesininspectionandqualitycontrol,
	45	Testingofstructures,statisticalanalysis.