

COST MANAGEMENT OF ENGINEERING PROJECTS

(GR20D5146)

II - M. Tech – I Semester

Mr. AKULA PRAKASH
ASSISTANT PROFESSOR



Department of Civil Engineering

Gokaraju Rangaraju Institute of Engineering and Technology

Bachupally, Kukatpally, Hyderabad – 500 090. (040) 6686 4440

COURSE FILE Enclosures

1. Time Table
2. Syllabus copy for your course.
3. Course Plan
4. Unit Plan and
5. Lesson Plan
6. List of Program Objectives & Outcomes;
7. Course Objectives & Outcomes
8. List of various Mappings/Matrix for your Course
 - a. Mapping between Course Objectives and Course Outcomes
 - b. Mapping between Course Objectives and Program Outcomes(POs)
 - c. Mapping between Course Outcomes and Mandatory/Program Outcomes(POs)
 - d. Mapping between Courses with titles & codes and Mandatory/Program Outcomes(POs)
 - e. Mapping between the PEOs and Course Outcomes
 - f. Mapping between POs and Assignments and Assessments Methods
 - g. Mapping between the Assessment Methods and PEOs
9. List of Assessments, Assignments/Seminar Topics, Projects, Experiments, etc. you have given to students and the Criteria used for evaluation
10. Assignment sheets,
11. Tutorial Sheets, and
12. Course Schedules
13. At least 1 to 3 Assessment Rubrics for your course
14. Evaluation Strategy
15. Guidelines to study the course
16. Students Roll lists (Both Sections)
17. Attach the Marks list of the students in respect of CAE -I (Continuous Assessment Exam), CAE-II, etc. and Final Exam for this Course in your course File.
18. Photocopy of the best, average and the worst answer sheets for CAE-I, & CAE-II be included in the Course File.
19. Model question papers if any, which you have distributed to the students in the beginning of the Semester for the Course may be included in the Course File.
20. Any Teaching/Learning Aids, additional resources like OHP transparencies, LCD Projection material, Soft & Hard Copies of handouts used may also be filed in it.
21. Course Completion Status
22. Grading Sheet of the Course for all students



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TIME TABLE

II MTech (GR20) – I Semester

AY: 2021-22

DAY/ HOUR	09:00 - 10:00	10:10 - 11:10	11:00 - 12:00	12:00-1:00	1:00-2:00	2:00-3:00	3:00-4:00
Monday	CMEP						
Tuesday			CMEP				
Wednesday							
Thursday							
Friday							
Saturday							

CODE	Subject	Faculty
GR20D5146	COST MANAGEMENT OF ENGINEERING PROJECTS	Mr. Akula Prakash

**GOKARAJU RANGARAJU
INSTITUTE OF ENGINEERING AND TECHNOLOGY**

COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

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3	0	0	3

Pre – Requisite : Construction Process, Costs involved in Construction, Basic Management and Decision-making Skills.

COURSE OBJECTIVES:

1. To attain knowledge in Cost Management process and Costing System.
2. Ability to understand the basic concepts of Project planning, execution, and cost control
3. Discuss about Various types of costs and its behaviour along with Quality Management
4. Identify various types of Budgets involved in Cost Management process
5. Broaden the career potential of available techniques and problems available in Cost Management.

Course Outcomes:

1. Discuss various construction costs to manage a construction project.
2. Summarize different construction activities and its application related to cost based on the field requirements.
3. Identify Cost Behaviour of various types of cost and Quality Management
4. Identifying various construction Budgets involved Cost Management process.
5. Discussing various types of Techniques and Problem-solving techniques involved in Construction

Unit I

Introduction and Overview of the Strategic Cost Management Process, Cost concepts in decision-making; relevant cost, Differential cost, Incremental cost, Opportunity cost. Objectives of a Costing System; Inventory valuation; Creation of a Database for operational control; Provision of data for Decision-Making.

Unit II

Project: Meaning, Different types, why to manage, cost overruns centres, various stages of project execution: conception to commissioning. Project execution as conglomeration of technical and non- technical activities. Detailed Engineering activities. Pre project execution main clearances and documents Project team: Role of each member. Importance Project site: Data required with significance. Project contracts. Types and contents. Project execution Project cost control. Bar charts and Network diagram. Project commissioning: mechanical and process

Unit III

Cost Behaviour and Profit Planning Marginal Costing; Distinction between Marginal Costing and Absorption Costing; Break-even Analysis, Cost-Volume-Profit Analysis. Various decision-making problems. Standard Costing and Variance Analysis. Pricing strategies: Pareto Analysis. Target costing, Life Cycle Costing. Costing of service sector. Just-in-time approach, Material Requirement Planning, Enterprise Resource Planning, Total Quality Management and Theory of constraints. Activity-Based Cost Management, Bench Marking; Balanced Score Card and Value-Chain Analysis.

Unit IV

Budgetary Control; Flexible Budgets; Performance budgets; Zero-based budgets. Measurement of Divisional profitability pricing decisions including transfer pricing.

Unit V

Quantitative techniques for cost management, Linear Programming, PERT/CPM, Transportation problems, Assignment problems, Simulation, Learning Curve Theory.

Reference Books

1. Cost Accounting A Managerial Emphasis, Prentice Hall of India, New Delhi.
2. Charles T. Horngren and George Foster, Advanced Management Accounting.
3. Robert S Kaplan Anthony A. Alkinson, Management & Cost Accounting.
4. Ashish K. Bhattacharya, Principles & Practices of Cost Accounting A. H. Wheeler publisher.
5. N.D. Vohra, Quantitative Techniques in Management, Tata McGraw Hill Book Co.Ltd



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**SCHEDULE OF INSTRUCTIONS
COURSE PLAN**

Academic Year : 2021 - 22

Semester : I

Name of the Program: M.Tech Structural Engineering Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Class : M.Tech. II/I

S. No.	Unit No	Date	No. of Classes	Topics
1	I	01-11-2021	1	Introduction to CMEP
2		01-11-2021	1	Introduction Strategic Cost Management Process
3		02-11-2021	1	Overview of the Strategic Cost Management Process
4		08-11-2021	1	Cost concepts in decision-making
5		08-11-2021	1	Relevant cost, Differential cost
6		09-11-2021	1	Incremental cost
7		15-11-2021	1	Opportunity cost
8		15-11-2021	1	Objectives of a Costing System
9		16-11-2021	1	Inventory valuation
10		22-11-2021	1	Creation of a Database for operational control
11		22-11-2021	1	Provision of data for Decision-Making
12	II	23-11-2021	1	Project: Meaning, Different types
13		29-11-2021	1	Cost overruns centres
14		29-11-2021	1	Various stages of project execution
15		30-11-2021	1	Conception to commissioning.
16		06-12-2021	1	Project execution as conglomeration of technical and non-technical activities.
17		06-12-2021	1	Detailed Engineering activities.
18		07-12-2021	1	Pre project execution main clearances and documents
19		13-12-2021	1	Project team: Role of each member.
20		13-12-2021	1	Importance Project site: Data required with significance.
21		14-12-2021	1	Project contracts. Types and contents.
22		20-12-2021	1	Project execution Project cost control
23		20-12-2021	1	Bar charts and Network diagram
24		21-12-2021	1	Project commissioning: mechanical and process

25	III	27-12-2021	1	Cost Behavior and Profit Planning
26		27-12-2021	1	Marginal Costing
27		28-12-2021	1	Distinction between Marginal Costing and Absorption Costing
28		03-01-2022	1	Break-even Analysis, Cost-Volume-Profit Analysis
29		03-01-2022	1	Various decision-making problems
30		04-01-2022	1	Standard Costing and Variance Analysis
31		10-01-2022	1	Pricing strategies: Pareto Analysis Target costing
32		10-01-2022	1	Life Cycle Costing, Costing of service sector
33		11-01-2022	1	Just-in-time approach Material Requirement Planning
34		17-01-2022	1	Enterprise Resource Planning
35		17-01-2022	1	Total Quality Management, Theory of constraints
36		18-01-2022	1	Activity-Based Cost Management, Bench Marking
37		24-01-2022	1	Balanced Score Card Value-Chain Analysis
38	IV	24-01-2022	1	Budgetary Control
39		25-01-2022	1	Flexible Budgets
40		31-01-2022	1	Performance budgets
41		31-01-2022	1	Zero-based budgets
42		01-02-2022	1	Comparison of all types of Budgets
43		07-02-2022	1	Measurement of Divisional profitability pricing decisions including transfer pricing.
44		07-02-2022	1	Measurement of Divisional profitability pricing decisions including transfer pricing.
45	V	08-02-2022	1	Quantitative techniques for cost management
46		14-02-2022	1	Linear Programming
47		14-02-2022	1	Assignment problems
48		15-02-2022	1	Assignment problems
49		21-02-2022	1	PERT/CPM
50		21-02-2022	1	Transportation problems
51		22-02-2022	1	Simulation and Learning Curve Theory

Signature of HOD

Signature of faculty

Date:

Date:



Gokaraju Rangaraju Institute of Engineering and Technology
Department of Civil Engineering

COURSE SCHEDULE

Academic Year : 2021 - 22

Semester : I

Name of the Program: M.Tech Structural Engineering Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

The Schedule for the whole Course / Subject is:

Unit. No.	Description	Duration (Date)		Total No. of Periods
		From	To	
1.	Overview of CMEP	01-11-2021	22-11-2021	11
2.	Project types and Contracts	23-11-2021	21-12-2021	13
3.	Cost Behavior	27-12-2021	24-01-2022	13
4.	Budgetary Control	24-01-2022	07-02-2022	07
5.	Quantitative techniques for cost management	08-02-2022	22-02-2022	7

Total No. of Instructional periods available for the course: **51** Hours



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LESSON PLAN

Academic Year : 2021 - 22

Date: 01-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 1

Duration of Lesson:

Lesson Title: Introduction to CMEP

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Introduction to CMEP

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS

:

- Introduction to CMEP

Assignment / Questions: Write a short note on CMEP

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LESSON PLAN

Academic Year : 2021 - 22

Date: 01-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 2

Duration of Lesson:

Lesson Title: Introduction Strategic Cost Management Process

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Introduction Strategic Cost Management Process

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Introduction Strategic Cost Management Process

Assignment / Questions:

Introduction Strategic Cost Management Process

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 02-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 3

Duration of Lesson:

Lesson Title: Overview of the Strategic Cost Management Process

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Overview of the Strategic Cost Management Process

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Overview of the Strategic Cost Management Process

Assignment / Questions:

Overview of the Strategic Cost Management Process

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 08-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 4

Duration of Lesson:

Lesson Title: Cost concepts in decision-making

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Cost concepts in decision-making

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Cost concepts in decision-making

Assignment / Questions:

Cost concepts in decision-making

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 08-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 5

Duration of Lesson:

Lesson Title: Relevant cost, Differential cost

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Relevant cost, Differential cost

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

Relevant cost, Differential cost

Assignment / Questions:

Relevant cost, Differential cost

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 09-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 6

Duration of Lesson:

Lesson Title: Incremental cost

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Incremental cost

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Incremental cost

Assignment / Questions:

Incremental cost

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 15-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 7

Duration of Lesson:

Lesson Title: Opportunity cost

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Opportunity cost

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Opportunity cost

Assignment / Questions:

Opportunity cost

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 15-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 8

Duration of Lesson:

Lesson Title: Objectives of a Costing System

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Objectives of a Costing System

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Objectives of a Costing System

Assignment / Questions:

Objectives of a Costing System

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 16-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 9

Duration of Lesson:

Lesson Title: Inventory valuation

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Inventory valuation

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Inventory valuation

Assignment / Questions:

Inventory valuation

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 22-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 10

Duration of Lesson:

Lesson Title: Creation of a Database for operational control

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Creation of a Database for operational control

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

Creation of a Database for operational control

Assignment / Questions:

Creation of a Database for operational control

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 22-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 11

Duration of Lesson:

Lesson Title: Provision of data for Decision-Making

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Provision of data for Decision-Making

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

Provision of data for Decision-Making

Assignment / Questions:

Provision of data for Decision-Making

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 23-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 12

Duration of Lesson:

Lesson Title: **Project:** Meaning, Different types

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Project: Meaning, Different types

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

Project: Meaning, Different types

Assignment / Questions:

Project: Meaning, Different types

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 29-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 13

Duration of Lesson:

Lesson Title: Cost overruns centres

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to calculate quantities of:

Cost overruns centres

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

Cost overruns centres

Assignment / Questions:

Cost overruns centres

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 29-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

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Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 14

Duration of Lesson:

Lesson Title: Various stages of project execution

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Various stages of project execution

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

Various stages of project execution

Assignment / Questions:

Various stages of project execution

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 30-11-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 15

Duration of Lesson

Lesson Title: Conception to commissioning.

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Conception to commissioning.

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

Conception to commissioning.

Assignment / Questions:

Conception to commissioning.

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 06-12-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: Construction Technology and Project Management Course
Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 16

Duration of Lesson:

Lesson Title: Project execution as conglomeration of technical and non- technical activities.

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Project execution as conglomeration of technical and non- technical activities.

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

Project execution as conglomeration of technical and non- technical activities.

Assignment / Questions:

Project execution as conglomeration of technical and non- technical activities.

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 06-12-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 17

Duration of Lesson:

Lesson Title: Detailed Engineering activities.

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Detailed Engineering activities.

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Detailed Engineering activities.

Assignment / Questions:

Detailed Engineering activities.

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 07-12-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 18

Duration of Lesson:

Lesson Title: Pre project execution main clearances and documents

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Pre project execution main clearances and documents

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Pre project execution main clearances and documents

Assignment / Questions:

Problems on Pre project execution main clearances and documents

Signature of faculty



Gokaraju Rangaraju Institute of Engineering and Technology
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LESSON PLAN

Academic Year : 2021 - 22

Date: 13-12-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 19

Duration of Lesson:

Lesson Title: Project team: Role of each member.

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Project team: Role of each member.

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

Project team: Role of each member.

Assignment / Questions:

Project team: Role of each member.

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 13-12-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 20

Duration of Lesson:

Lesson Title: Importance Project site: Data required with significance

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Pricing strategies: Importance Project site: Data required with significance

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

Importance Project site: Data required with significance.

Assignment / Questions:

Importance Project site: Data required with significance.

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 14-12-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 21

Duration of Lesson:

Lesson Title: Project contracts. Types and contents.

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Project contracts. Types and contents.

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Project contracts. Types and contents.

Assignment / Questions:

Project contracts. Types and contents.

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 20-12-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 22

Duration of Lesson:

Lesson Title: Project execution Project cost control

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Project execution Project cost control

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Project execution Project cost control

Assignment / Questions:

Project execution Project cost control

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 20-12-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 23

Duration of Lesson: 1 hr

Lesson Title: Bar charts and Network diagram

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Bar charts and Network diagram

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Bar charts and Network diagram

Assignment / Questions:

Bar charts and Network diagram

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 21-12-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 24

Duration of Lesson:

Lesson Title: Project commissioning: mechanical and process

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Project commissioning: mechanical and process

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Project commissioning: mechanical and process

Assignment / Questions:

Project commissioning: mechanical and process

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 27-12-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 25

Duration of Lesson:

Lesson Title: Cost Behavior and Profit Planning

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Cost Behavior and Profit Planning

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Cost Behavior and Profit Planning

Assignment / Questions:

Cost Behavior and Profit Planning

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 27-12-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 26

Duration of Lesson:

Lesson Title: Marginal Costing

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Marginal Costing

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Marginal Costing

Assignment / Questions:

Marginal Costing

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 28-12-2021

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 27

Duration of Lesson:

Lesson Title: Distinction between Marginal Costing and Absorption Costing

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Distinction between Marginal Costing and Absorption Costing

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Distinction between Marginal Costing and Absorption Costing

Assignment / Questions:

Distinction between Marginal Costing and Absorption Costing

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 03-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 28

Duration of Lesson:

Lesson Title: Break-even Analysis, Cost-Volume-Profit Analysis

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Break-even Analysis, Cost-Volume-Profit Analysis

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Break-even Analysis, Cost-Volume-Profit Analysis

Assignment / Questions:

Break-even Analysis, Cost-Volume-Profit Analysis

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 03-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 29

Duration of Lesson:

Lesson Title: Various decision-making problems

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Various decision-making problems

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

Various decision-making problems

Assignment / Questions:

Various decision-making problems

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 04-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 30

Duration of Lesson:

Lesson Title: Standard Costing and Variance Analysis

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Standard Costing and Variance Analysis

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Standard Costing and Variance Analysis

Assignment / Questions:

Standard Costing and Variance Analysis

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 10-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 31

Duration of Lesson:

Lesson Title: Pricing strategies: Pareto Analysis Target costing

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Pricing strategies: Pareto Analysis Target costing

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Pricing strategies: Pareto Analysis Target costing

Assignment / Questions:

Pricing strategies: Pareto Analysis Target costing

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 10-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 32

Duration of Lesson:

Lesson Title: Life Cycle Costing, Costing of service sector

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Life Cycle Costing, Costing of service sector

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Life Cycle Costing, Costing of service sector

Assignment / Questions:

Life Cycle Costing, Costing of service sector

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 11-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 33

Duration of Lesson:

Lesson Title: Just-in-time approach Material Requirement Planning

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Just-in-time approach Material Requirement Planning

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

Just-in-time approach Material Requirement Planning

Assignment / Questions:

Just-in-time approach Material Requirement Planning

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 17-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 34

Duration of Lesson:

Lesson Title: Enterprise Resource Planning

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Enterprise Resource Planning

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Enterprise Resource Planning

Assignment / Questions:

Enterprise Resource Planning

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 17-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 35

Duration of Lesson:

Lesson Title: Total Quality Management, Theory of constraints

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Total Quality Management, Theory of constraints

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Total Quality Management, Theory of constraints

Assignment / Questions:

Total Quality Management, Theory of constraints

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 18-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 36

Duration of Lesson:

Lesson Title: Activity-Based Cost Management, Bench Marking

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Activity-Based Cost Management, Bench Marking

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Activity-Based Cost Management, Bench Marking

Assignment / Questions:

Activity-Based Cost Management, Bench Marking

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 24-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 37

Duration of Lesson:

Lesson Title: Balanced Score Card Value-Chain Analysis

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Balanced Score Card Value-Chain Analysis

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Balanced Score Card Value-Chain Analysis

Assignment / Questions:

Balanced Score Card Value-Chain Analysis

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 24-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 38

Duration of Lesson:

Lesson Title: Budgetary Control

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Budgetary Control

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Budgetary Control

Assignment / Questions:

Budgetary Control

Signature of faculty



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LESSON PLAN

25
Academic Year : 2021 - 22 Date: 25-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS
Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 39 Duration of Lesson:

Lesson Title: Flexible Budgets

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Flexible Budgets

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Flexible Budgets

Assignment / Questions:

Flexible Budgets

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 31-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 40

Duration of Lesson:

Lesson Title: Performance budgets

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Performance budgets

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Performance budgets

Assignment / Questions:

Performance budgets

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 31-01-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 41

Duration of Lesson:

Lesson Title: Zero-based budgets

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Zero-based budgets

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Zero-based budgets

Assignment / Questions:

Zero-based budgets

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 01-02-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 42

Duration of Lesson:

Lesson Title: Zero-based budgets

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Zero-based budgets

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Zero-based budgets

Assignment / Questions:

Zero-based budgets

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 07-02-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 43

Duration of Lesson:

Lesson Title: Measurement of Divisional profitability pricing decisions including transfer pricing.

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Measurement of Divisional profitability pricing decisions including transfer pricing.

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Measurement of Divisional profitability pricing decisions including transfer pricing.

Assignment / Questions:

Measurement of Divisional profitability pricing decisions including transfer pricing.

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 07-02-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 44

Duration of Lesson:

Lesson Title: Measurement of Divisional profitability pricing decisions including transfer pricing.

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Measurement of Divisional profitability pricing decisions including transfer pricing.

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Measurement of Divisional profitability pricing decisions including transfer pricing.

Assignment / Questions:

Measurement of Divisional profitability pricing decisions including transfer pricing.

Signature of faculty



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Bachupally, Kukatpally, Hyderabad – 500 090. (040) 6686 4440

LESSON PLAN

Academic Year : 2021 - 22

Date: 08-02-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 45

Duration of Lesson:

Lesson Title: Quantitative techniques for cost management

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Quantitative techniques for cost management

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Quantitative techniques for cost management

Assignment / Questions:

Quantitative techniques for cost management

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 14-02-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 46

Duration of Lesson:

Lesson Title: Linear Programming

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Linear Programming

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Linear Programming

Assignment / Questions:

Linear Programming

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 14-02-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 47

Duration of Lesson:

Lesson Title: Assignment problems

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Assignment problems

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Assignment problems

Assignment / Questions:

Assignment problems

Signature of faculty



Gokaraju Rangaraju Institute of Engineering and Technology
(Autonomous)
Bachupally, Kukatpally, Hyderabad – 500 090. (040) 6686 4440

LESSON PLAN

Academic Year : 2021 - 22

Date: 15-02-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 48

Duration of Lesson:

Lesson Title Assignment problems

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Assignment problems

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Assignment problems

Assignment / Questions:

Assignment problems

Signature of faculty



Gokaraju Rangaraju Institute of Engineering and Technology
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Bachupally, Kukatpally, Hyderabad – 500 090. (040) 6686 4440

LESSON PLAN

Academic Year : 2021 - 22

Date: 21-02-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 49

Duration of Lesson:

Lesson Title: PERT/CPM

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

PERT/CPM

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ PERT/CPM

Assignment / Questions:

PERT/CPM

Signature of faculty



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LESSON PLAN

Academic Year : 2021 - 22

Date: 21-02-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 50

Duration of Lesson:

Lesson Title: Transportation problems

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Transportation problems

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

➤ Transportation problems

Assignment / Questions:

Transportation problems

Signature of faculty



Gokaraju Rangaraju Institute of Engineering and Technology
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Bachupally, Kukatpally, Hyderabad – 500 090. (040) 6686 4440

LESSON PLAN

Academic Year : 2021 - 22

Date: 22-02-2022

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Lesson No: 51

Duration of Lesson:

Lesson Title: Simulation

INSTRUCTIONAL/LESSON OBJECTIVES:

On completion of this lesson the student shall be able to:

Simulation

TEACHING AIDS : Online Teaching Tools, Newton Software

TEACHING POINTS :

- Simulation
- Learning Curve Theory

Assignment / Questions:

Write about Simulation and Learning Curve Theory

Signature of faculty



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous)

Bachupally, Kukatpally, Hyderabad – 500 090. (040) 6686 4440

Vision

To become a pioneering centre in civil engineering.

Mission

- To produce well qualified and talented engineers by imparting quality education.
- To enhance the skills of entrepreneurship, innovativeness, management, and life-long learning in young engineers.
- To inculcate professional ethics and make socially responsible engineers.

PEOs

PEO 1: Graduates of the program will equip with professional expertise on the theories, process, methods and techniques for building high-quality structures in a cost-effective manner.

PEO 2: Graduates of the program will be able to design structural components using contemporary softwares and professional tools with quality practices of international standards.

PEO 3: Graduates of the program will be effective as both an individual contributor and a member of a development team with professional, ethical and social responsibilities.

PEO 4: Graduates of the program will grow professionally through continuing education, training, research, and adapting to the rapidly changing technological trends globally in structural engineering.

Programme Outcomes

Graduates of the Civil Engineering programme will be able to

PO 1: An ability to independently carry out research and develop solutions for a practical problem in structural engineering.

PO 2: An ability to present technical information in form of structural drawings and documents conforming to desired specifications.

PO 3: The student should develop in-depth proficiency in the analysis and design of advanced structures, HSC/HPC mixes, Shells and fold plates, earthquake resistant buildings, ability to model, discriminate elastic/plastic behavior of materials and synthesize new designs using contemporary software's.

PO 4: Ability to assess the impact of professional engineering solutions in environmental context along with societal, health, safety, legal, ethical and cultural issues and the need for sustainable development.

PO 5: Ability to possess critical thinking skills and solve core, complex and multidisciplinary structural engineering problems.

PO 6: Ability to recognize the need for life-long learning to improve knowledge and competence.



Gokaraju Rangaraju Institute of Engineering and Technology
(Autonomous)
Bachupally, Kukatpally, Hyderabad – 500 090. (040) 6686 4440

COURSE OBJECTIVES

Academic Year : 2021 - 22

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

S.No	Objectives
1	To attain knowledge in Cost Management process and Costing System.
2	Ability to understand the basic concepts of Project planning, execution, and cost control
3	Discuss about Various types of costs and its behavior along with Quality Management
4	Identify various types of Budgets involved in Cost Management process
5	Broaden the career potential of available techniques and problems available in Cost Management.

Signature of HOD

Signature of faculty

Date:

Date:



Gokaraju Rangaraju Institute of Engineering and Technology
(Autonomous)
Bachupally, Kukatpally, Hyderabad – 500 090. (040) 6686 4440

COURSE OUTCOMES

Academic Year : 2021 - 22

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

On completion of this Subject/Course the student shall be able to:

CO Designation	Course Outcomes
CO1	Discuss various construction costs to manage a construction project.
CO2	Summarize different construction activities and its application related to cost based on the field requirements.
CO3	Identify Cost Behaviour of various types of cost and Quality Management
CO4	Identifying various construction Budgets involved Cost Management process.
CO5	Discussing various types of Techniques and Problem-solving techniques involved in Construction

Signature of HOD

Signature of faculty

Date:

Date:



Mappings of CO's, COB's Vs PO's, POB's

Course Objectives - Course Outcomes Relationship Matrix

Course Objectives \ Course Outcomes	1	2	3	4	5
1		X			
2				X	
3	X				
4			X		
5					X

Course Outcomes - Program Outcomes relations (Contributions: High, Medium and Low)

Code	Subject	Course Outcomes	Program Outcomes					
			1	2	3	4	5	6
GR20D5146	COST MANAGEMENT OF ENGINEERING PROJECTS	Discuss various construction costs to manage a construction project.	H			M	H	
		Summarize different construction activities and its application related to cost based on the field requirements.	H			M		H
		Identify Cost Behaviour of various types of cost and Quality Management	H			M		H
		Identifying various construction Budgets involved Cost Management process.	H	M		H	H	
		Discussing various types of Techniques and Problem-solving techniques involved in Construction	H	M		H	H	

Course Objectives - Program Outcomes (PO's) Relationship Matrix

<div> <div>Program Outcomes</div> <div>Course Objectives</div> </div>	1	2	3	4	5	6
1	X					X
2	X					X
3	X	X		X	X	X
4	X					X
5	X					X

Course Outcomes - Program Outcomes relations (PO's) Relationship Matrix

<div> <div>Program Outcomes</div> <div>Course Outcomes</div> </div>	1	2	3	4	5	6
1	X					X
2	X					X
3	X					X
4	X					X
5	X	X			X	X

Program Educational Objectives (PEOs)- Course Outcomes Relationship Matrix

<div> <div>Program Educational Objectives</div> <div>Course Outcomes</div> </div>	1	2	3	4
1	X	X	X	
2	X	X	X	X
3	X	X	X	
4	X	X		X
5	X	X	X	X



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Assessment in Program Outcomes (PO's) Relationship Matrix

Assessment:

1. Assignment
2. Internal Examination
3. External Examination
4. Practical Projects
5. Viva

Program Outcomes Assessments	1	2	3	4	5	6
1						
2						
3						
4						
5						

Assignments & Assessments-Program Educational Objectives (PEO's) Relationship Matrix

Assessment:

1. Assignment
2. Internal Examination
3. External Examination
4. Practical Projects
5. Viva

Program Educational Objectives Assessments	1	2	3	4
1				
2				
3				
4				
5				



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ASSIGNMENT – 1

1. Write a Brief note on Strategic cost Management in Engineering Projects
2. Write a short notes on
 - i) Project Team
 - ii) Role of Each member in Project Team
3. Explain the importance of Bar Charts and Network Diagrams representation in Project Planning and Scheduling

ASSIGNMENT - 2

1. Write a short note on
 - i) Break-even Analysis
 - ii) Cost-Volume-Profit Analysis
2. Differentiate between Performance Budget and Zero-Based Budget
3. Write a short note on
 - i) Transportation problems
 - ii) Assignment problems



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COURSE SCHEDULE

Academic Year : 2021 - 22

Semester : I

Name of the Program: M.Tech Structural Engineering **Year:** II year - I Sem
Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS
Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH **Dept.:** Civil Engineering
Designation: ASSISTANT PROFESSOR

The Schedule for the whole Course / Subject is:

Unit. No.	Description	Duration (Date)		Total No. of Periods
		From	To	
1.	Overview of CMEP	01-11-2021	22-11-2021	11
2.	Project types and Contracts	23-11-2021	21-12-2021	13
3.	Cost Behavior	27-12-2021	24-01-2022	13
4.	Budgetary Control	24-01-2022	07-02-2022	07
5.	Quantitative techniques for cost management	08-02-2022	22-02-2022	7

Total No. of Instructional periods available for the course: **51** Hours



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous)

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Rubric Template – CMEP

Academic Year : 2021 - 22

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Objectives:

Students Outcomes:

		Beginning	Developing	Reflecting Development	Accomplished	Exemplary	Score
Name of the Student	Performance Criteria	1	2	3	4	5	
X	Identify various building materials and their structural requirements.	Low level	Able to understand	Ability to explain	Full knowledge	Thoroughly analyzing & applying	
	Explain the significance of cement and lime in construction.	Low level	Able to understand	Ability to explain	Full knowledge	Thoroughly analyzing & applying	
	Identify the suitable material for construction and various building components.	Low level	Able to understand	Ability to explain	Full knowledge	Thoroughly analyzing & applying	
	Review different types of masonry construction.	Low level	Able to understand	Ability to explain	Full knowledge	Thoroughly analyzing & applying	
	Discuss about various building services and planning and their characteristics	Low level	Able to understand	Ability to explain	Full knowledge	Thoroughly analyzing & applying	



**Gokaraju Rangaraju Institute of Engineering and Technology Department of
Civil Engineering**

EVALUATION STRATEGY

Academic Year : 2021 - 22

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

1. TARGET:

- a) Percentage for pass: 100%
- b) Percentage of class:

First class with distinction	
First class	
Pass class	
Total strength	

2. COURSE PLAN & CONTENT DELIVERY

• .

3. METHOD OF EVALUATION

3.1 ☐ Continuous Assessment Examinations (CAE-I, CAE-II)

3.2 ☐ Assignments/Seminars

3.3 ☐ Mini Projects

3.4 ☐ Quiz

3.5 ☐ Semester/End Examination

3.6 ☐ Others

4. List out any new topic(s) or any innovation you would like to introduce in teaching the subjects in this Semester.

.

Signature of HOD
Date:

Signature of faculty
Date:

Students Roll List M. Tech Structural Engineering II yr-I Sem – GR20 2021 -22



Gokaraju Rangaraju Institute of Engineering & Technology

Bachupally, Nizampet Road, Kukatpally, Hyderabad-500009

M.Tech (Structural Engineering)

Admitted Batch 2020-2022

S.No	ROLL NUMBER	NAME OF THE STUDENT
1	20241D2001	ADUVALA RAJESH KHANNA
2	20241D2002	DURGAM NISHIPRIYA
3	20241D2003	ASHALA SHARATH KUMAR
4	20241D2004	BODDUPALLI JAGADEESH
5	20241D2005	BOODIDA RAKESH KUMAR
6	20241D2006	H KARAN KUMAR
7	20241D2007	JADAV PAVAN KALYAN
8	20241D2008	JAKKULA SRINIVAS
9	20241D2009	JANGA AJAY KUMAR
10	20241D2010	JANGILI VIDYA SAGAR YADAV
11	20241D2011	KANDI USHA SRI
12	20241D2012	KOTLA SAI PRAKASH
13	20241D2013	KOTTE SAI KRISHNA
14	20241D2014	MADAM SAMKEERTHANA
15	20241D2015	MADHIKUNTALA SHIREESHA
16	20241D2016	MALYALA PRIYANKA
17	20241D2017	MANDALA NAVEEN
18	20241D2018	CHENNA JHANSI
19	20241D2019	MOHAMMED YASIR HUSSAIN
20	20241D2020	NARAPA SIVA BHASKAR REDDY
21	20241D2021	POLU SIREESH KUMAR REDDY
22	20241D2022	SAMA MADHAVI
23	20241D2023	SHAIK ANSAR AHMED
24	20241D2024	PANDRALA SANJANA
25	20241D2025	GUGULOTHU AMRUTHAKALA
26	20241D2026	JAGANNADHAM ROHITH KUMAR
27	20241D2027	DAIDA VERONICA PRIYADHARSHINI
28	20241D2028	ALETI GANESH
29	20241D2029	KAKI SAI TULASI PRASANTHI



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING & TECHNOLOGY

(Autonomous)

II M. Tech I Semester Mid- I Examinations, December 2021

DEPARTMENT OF CIVIL ENGINEERING

(STRUCTURAL ENGINEERING)

COST MANAGEMENT OF ENGINEERING PROJECTS

Date : 28/12/2021

SUBJECTIVE				
(Answer ALL questions. All questions carry equal marks)				
Time: 75 Minutes		3 * 5 = 15 Marks		
1	Write a Brief note on Strategic cost Management in Engineering Projects	[5]	CO 1	L1
OR				
2	Write a short note on Differential cost, Incremental cost, Opportunity cost.	[5]	CO 1	L1
3	Write a short note on i) Project Team ii) Role of Each member in Project Team	[5]	CO 2	L1
OR				
4	Explain the strategies for successful project completion	[5]	CO 2	L2
5	Discuss the cost concepts in decision making	[5]	CO 1	L2
OR				
6	Explain the importance of Bar Charts and Network Diagrams representation in Project Planning and Scheduling	[5]	CO 2	L2



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING & TECHNOLOGY
II M. Tech I Semester Mid- I Examinations, December 2021
DEPARTMENT OF CIVIL ENGINEERING
(STRUCTURAL ENGINEERING)
COST MANAGEMENT OF ENGINEERING PROJECTS

Date : 28/12/2021

OBJECTIVE Multiple Choice Questions (MCQs) (Answer ALL questions. All questions carry equal marks)		
Time: 15 Minutes		10 * 1/2 = 5 Marks
1	Who is responsible for realistic and accurate estimation of the project? a) Stakeholders b) Project manager. c) Project team d) Project sponsor	[]
2	While determining budget a project manager uses _____ processes. a) Executing. b) Controlling c) Planning d) Communication	[]
3	Earned Value (EV) means _____. a) How much money earned. c) What is the value of completed work. b) How much time is spent. d) How much funds are spent	[]
4	What is actual cost (total cost) (AC)? a) Current estimated and authorized budget to complete the work. b) Cost of the work to complete the work. c) The total cost of accomplished work at its current stage. d) A planned budget assigned to complete the work	[]
5	What criterion makes you increase pessimistic estimation? a) Funding constraints determined by sponsor. b) Risks identified during planning. c) Time constraints specified by customer. d) Quality requirements provided by stakeholders	[]
6	Which process monitors the status of the project and keeps updated the information about the project budget and manages changes to the cost baseline? a) Determine Budget b) Estimate costs. c) Control costs. d) Control account	[]
7	What set of tools and techniques can be used for estimating costs? a) Same as used to estimate scope. b) Same as used to estimate resource c) Same as used to estimate risk. d) Same as used to estimate time	[]
8	Amount that vendor received for conducting a project called _____. a) Revenue. b) Net income. c) Gross Profit. d) Expense	[]
9	What does the Basis of Estimates explain? a) Indication of the confidence level of the estimate. b) How the estimates were developed, documentation on all assumptions c) All units, references, and ranges of estimate d) All answers are right.	[]
10	What action should try first for decreasing estimation of cost and/or time? a) Increasing time and budget. b) Reducing or eliminating the risks. c) Reasonable cut of project scope. d) Increasing thresholds tolerance	[]

**GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY****Department of Civil Engineering****M.TECH (STRUCTURAL ENGINEERING)****MID - I Examination Marks - December 2021**

Programme: M. Tech		Year/ Sem: II / I		Course: Theory	A.Y: 2021-22
Course: CMEP		MID : I		Faculty Name:	Akula Prakash
S. No	Roll No	NAME OF THE STUDENT	Subjective Marks (15)	Objective Marks (5)	Total Marks (20)
1	20241D2001	ADUVALA RAJESH KHANNA	10	1	11
2	20241D2002	DURGAM NISHIPRIYA	13	2	15
3	20241D2003	ASHALA SHARATH KUMAR	8	2	10
4	20241D2004	BODDUPALLI JAGADEESH	9	1.5	11
5	20241D2005	BOODIDA RAKESH KUMAR	11	2	13
6	20241D2006	H KARAN KUMAR	10	3	13
7	20241D2007	JADAV PAVAN KALYAN	11	2	13
8	20241D2008	JAKKULA SRINIVAS	10	2	12
9	20241D2009	JANGA AJAY KUMAR	10	1.5	12
10	20241D2010	JANGILI VIDYA SAGAR YADAV	9	1.5	11
11	20241D2011	KANDI USHA SRI	12	1.5	14
12	20241D2012	KOTLA SAI PRAKASH	10	1.5	12
13	20241D2013	KOTTE SAI KRISHNA	9	2	11
14	20241D2014	MADAM SAMKEERTHANA	7	2	9
15	20241D2015	MADHIKUNTLA SHIREESHA	13	3	16
16	20241D2016	MALYALA PRIYANKA	13	3	16
17	20241D2017	MANDALA NAVEEN	8	2	10
18	20241D2018	CHENNA JHANSI	AB	AB	AB
19	20241D2019	MOHAMMED YASIR HUSSAIN	11	2	13
20	20241D2020	NARAPA SIVA BHASKAR REDDY	13	3	16
21	20241D2021	POLU SIREESH KUMAR REDDY	11	1.5	13
22	20241D2022	SAMA MADHAVI	10	2.5	13
23	20241D2023	SHAIK ANSAR AHMED	12	3	15
24	20241D2024	PANDRALA SANJANA	12	1.5	14
25	20241D2025	GUGULOTHU AMRUTHAKALA	10	2	12
26	20241D2026	JAGANNADHAM ROHITH KUMAR	9	3	12
27	20241D2027	DAIDA VERONICA PRIYADHARSHINI	13	2	15
28	20241D2028	ALETI GANESH	5	2	7
29	20241D2029	KAKI SAI TULASI PRASANTHI	11	1.5	13



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CIVIL ENGINEERING
M.TECH (STRUCTURAL ENGINEERING)

II M.TECH. I SEM., II MID-TERM (SUBJECTIVE) EXAMINATION, JANUARY - 2020

SUB: Cost Management in Engineering Projects

Date of Examination: 23/01/2021 (FN)

Time: 30 min

Max. Marks: 10

Answer any **Two**.

4. Write a short note on

- iii) Break-even Analysis
- iv) Cost-Volume-Profit Analysis

5. Differentiate between Performance Budget and Zero-Based Budget

6. Write a short note on

- iii) Transportation problems
- iv) Assignment problems



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CIVIL ENGINEERING
M.TECH (STRUCTURAL ENGINEERING)

II M.TECH. I SEM., II MID-TERM (OBJECTIVE) EXAMINATION, JANUARY – 2020

SUB: Cost Management in Engineering Projects

Date of Examination: 23/01/2021 (FN)

Time: 10 min

Max. Marks: 10

-
1. The difference between the time avail-to do a job and the time required to do the job, is known as[]
(A) Event (B) **Float** (C) Duration (D) Constraint
 2. A dummy activity
(A) Is artificially introduced (B) Is represented by a dotted line []
(C) Does not consume time (D) **All the above**
 3. The reduction in project time normally results in []
(A) Decreasing the direct cost and increasing indirect cost
(B) **Increasing the direct cost and decreasing the indirect cost**
(C) Increasing the direct cost and indirect cost both
(D) Decreasing the direct cost and indirect cost both
 4. Frederick W. Taylor introduced a system of working known as []
(A) Line organization (B) Line and staff organization
(C) **Functional organization** (D) Effective organization
 5. CPM is []
(A) Synthesising in concepts (B) Is built of activities-oriented programme
(C) Is based on time estimate (D) **All the above**
 6. The Overall in-charge of an organization at the site responsible for the execution of the works, is[]
(A) Executive Engineer (B) **Engineer** (C) Junior Engineer (D) Assistant Engineer
 7. The first stage of a construction, is []
(A) Preparation of estimate (B) Survey of the site (C) **Initiation of proposal** (D) Preparation of tender
 8. Sinking fund is []
(A) **The fund for rebuilding a structure when its economic life is over**
(B) Raised to meet maintenance costs
(C) The total sum to be paid to the municipal authorities by the tenants
(D) A part of the money kept in reserve for providing additional structures and structural modifications
 9. Interfering float is the difference between []
(A) **Total float and free float** (B) Total float and independent float
(C) Free float and independent float (D) None of the above
 10. Pick up the correct statement from the following: []
(A) Optimistic time estimate refers to activities (B) Pessimistic time estimate refers to activities
(C) Most likely time estimate refers to activities (D) **All the above**

GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

M.TECH - STRUCTURAL ENGINEERING

MID I EXAMINATION - NOVEMBER 2020

Subject Name: CMEP

Year & Sem : II & I

S.No	Roll No	Q.No 1 CO1(5M)	Q.No 2 CO2(5M)	Q.No 3 CO2(5M)
1	19241D2001	5	NA	5
2	19241D2002	5	5	NA
3	19241D2003	4	NA	5
4	19241D2004	4	5	NA
5	19241D2005	4	4	NA
6	19241D2006	5	5	NA
7	19241D2007	5	4	NA
8	19241D2008	NA	4	5
9	19241D2009	5	5	NA
10	19241D2010	5	NA	5
11	19241D2011	4	4	NA
12	19241D2012	NA	5	4
13	19241D2013	5	NA	5
14	19241D2014	5	4	NA
15	19241D2015	5	5	NA
16	19241D2016	4	4	NA
17	19241D2017	4	NA	5
18	19241D2018	2	NA	3
19	19241D2019	5	5	NA
20	19241D2020	4	4	NA
21	19241D2021	NA	5	5
22	19241D2022	5	5	NA
23	19241D2023	4	5	NA
24	19241D2024	5	NA	5
25	19241D2025	3	NA	4
26	19241D2026	5	4	NA
Total		102	82	51
No of students attempted(NSA)		23	18	11
Attempt %=(NSA/Total no		88.46	69.23	42.31
Attainment %		88.70	91.11	92.73
		CO1	CO2	
Attempt%		88.46	55.77	
Attainment %		88.70	91.92	
Faculty Sign.				HOD Sign.

GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY**Department of Civil Engineering****M.TECH (STRUCTURAL ENGINEERING)****MID - II Examination Marks - January 2021**

Programme: M. Tech	Year/ Sem: II / I	Course: Theory	A.Y: 2020-21
Course: CMEP	MID : II	Faculty Name:	Akula Prakash

S. No	Roll No	NAME OF THE STUDENT	Subjective Marks (10)	Objective Marks (10)	Total Marks (20)
1	19241D2001	ALLURI RANJITH	9	10	19
2	19241D2002	BODA BALARAJU	10	10	20
3	19241D2003	GORLA JAYASRI	8	8	16
4	19241D2004	GUGULOTH PRASHANTH NAIK	9	10	19
5	19241D2005	GUNTUPALLY NIKHIL	9	10	19
6	19241D2006	KAPARABOINA GREESHMA	10	10	20
7	19241D2007	KARNATI VAMSI KRISHNA	10	8	18
8	19241D2008	KASARLA THARUN KUMAR REDDY	10	10	20
9	19241D2009	KUNCHE SHARMILA SAI SREE	10	10	20
10	19241D2010	KURELLY SPANDANA	10	9	19
11	19241D2011	MD HASHAM	7	9	16
12	19241D2012	MEDICHELM CHAITANYA	5	8	13
13	19241D2013	MEERA ARUN	10	10	20
14	19241D2014	N NAGA SAI PRAVALLIKA	10	10	20
15	19241D2015	NUTAKKI SAI KETANA	10	10	20
16	19241D2016	PEDDABUDI RANJEETH KUMAR	8	10	18
17	19241D2017	POGULA ANUDEEP	9	5	14
18	19241D2018	ROHITH NAIDU T Y	8	10	18
19	19241D2019	S V S SANKEERTH	10	10	20
20	19241D2020	SANIKOMMU DEEPAK REDDY	7	7	14
21	19241D2021	SIRIPURAM VAMSHISHEELA	10	10	20
22	19241D2022	SRIMANTHULA CHANDANA	8	7	15
23	19241D2023	SURAM RAJU	10	9	19
24	19241D2024	THANDRA ARUN	9	10	19
25	19241D2025	VISHAL YADAV MALLELA	7	10	17
26	19241D2026	VUSAKOILA SAIKRISHNA	10	10	20

No. of Absentees: NIL**Total Strength: 26****Signature of Faculty**



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

M.TECH - STRUCTURAL ENGINEERING

MID II EXAMINATION - JANUARY 2021

Subject Name: CMEP

Year & Sem : II & I

		Q.No 1a	Q.No 1b	Q.No 2	Q.No 3a	Q.No 3b
S.No	Roll No	CO3(2.5M)	CO3(2.5M)	CO4(5M)	CO5(2.5M)	CO5(2.5M)
1	19241D2001	NA	NA	4	2.5	2.5
2	19241D2002	2.5	2.5	5	NA	NA
3	19241D2003	NA	NA	4	2	2
4	19241D2004	2	2	NA	2.5	2.5
5	19241D2005	2	2	5	2	2
6	19241D2006	NA	NA	5	2.5	2.5
7	19241D2007	NA	NA	5	2.5	2.5
8	19241D2008	2.5	2.5	NA	2.5	2.5
9	19241D2009	2.5	2.5	5	2.5	2.5
10	19241D2010	NA	NA	5	2.5	2.5
11	19241D2011	NA	NA	4	1.5	1.5
12	19241D2012	NA	NA	NA	2.5	2.5
13	19241D2013	2.5	2.5	NA	2.5	2.5
14	19241D2014	2.5	2.5	5	2.5	2.5
15	19241D2015	NA	NA	5	2.5	2.5
16	19241D2016	NA	NA	3	2.5	2.5
17	19241D2017	2	2	5	2	2
18	19241D2018	NA	NA	5	1.5	1.5
19	19241D2019	2.5	2.5	5	NA	NA
20	19241D2020	2	2	NA	2	1
21	19241D2021	2.5	2.5	5	2.5	2.5
22	19241D2022	NA	NA	4	2	2
23	19241D2023	2.5	2.5	NA	2.5	2.5
24	19241D2024	2	2	5	2	2
25	19241D2025	1.5	1.5	4	NA	NA
26	19241D2026	NA	NA	5	2.5	2.5
Total		31.5	31.5	93	52.5	51.5
No of students		14	14	20	23	23
Attempt %=(NSA/Total no		53.85	53.85	76.92	88.46	88.46

		CO3	CO4	CO5		
	Attempt%	53.85	76.92	88.46		
	Attainment %	90.00	93.00	91.30		
Faculty Sign.					HOD Sign.	

GR18 2020-21 M. Tech STE 210, Section: A GR20D5146

Cost Management of Engineering Projects Sessional Marks

S.No	Roll No	MID-I Marks	MID-II Marks	Tutorial Marks	Assessment Marks	Sessional Marks
1	19241D2001	20	19	5	4	29
2	19241D2002	20	20	5	5	30
3	19241D2003	19	16	5	5	28
4	19241D2004	19	19	5	4	28
5	19241D2005	18	19	5	4	28
6	19241D2006	20	20	5	4	29
7	19241D2007	19	18	5	5	29
8	19241D2008	19	20	5	5	30
9	19241D2009	20	20	5	5	30
10	19241D2010	19	19	5	5	29
11	19241D2011	18	16	5	4	26
12	19241D2012	19	13	5	5	26
13	19241D2013	20	20	5	5	30
14	19241D2014	19	20	5	5	30
15	19241D2015	19	20	5	5	30
16	19241D2016	18	18	5	5	28
17	19241D2017	19	14	5	5	27
18	19241D2018	15	18	5	4	26
19	19241D2019	20	20	5	5	30
20	19241D2020	11	14	5	5	23
21	19241D2021	19	20	5	5	30
22	19241D2022	20	15	5	5	28
23	19241D2023	19	19	5	5	29
24	19241D2024	20	19	5	5	30
25	19241D2025	17	17	5	4	26
26	19241D2026	19	20	5	5	30

Faculty Signature

MODEL QUESTION PAPERS

COST MANAGEMENT OF ENGINEERING PROJECTS (Structural Engineering)

Time: 2 hours

Max Marks: 70

Answer any FIVE questions. All questions carry equal marks

5 * 14 = 70 Marks

1. (a) Discuss the cost concepts in Decision making. [14]
(b) Enumerate the steps in strategic Cost Management.
2. (a) Elucidate the different types of Projects. [14]
(b) Explain the strategies for successful Project Execution.
3. (a) What are different methods of pricing Strategies followed by companies? [14]
(b) Discuss about Total Quality Management.
4. Distinguish between Fixed Budget, Flexible Budget and Performance Budget. [14]
5. (a) Explain the following terms in PERT/CPM: (i) Earliest time (ii) Latest time (iii) Total activity time (iv) Even slack and (v) Critical path. [14]
(b) Draw a network diagram and find critical path for the following activities

Activity	Duration
1-2	10
1-3	15
2-4	10
2-5	15
3-5	12
4-6	11
5-6	9

6. (a) Restate various method of Inventory Valuation. [14]
(b) Describe the Various Project Characteristics.
7. (a) Explain about Total Costing. [14]
(b) Discuss Advantages and Disadvantages of Budgetary Control.
8. (a) What are various terms used in Networks? [14]
(b) Elucidate the concept of Material Requirement Planning.



Gokaraju Rangaraju Institute of Engineering and Technology
(Autonomous)
Bachupally, Kukatpally, Hyderabad – 500 090. (040) 6686 4440

COURSE COMPLETION STATUS

Academic Year : 2021 - 22

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: MR. AKULA PRAKASH

Dept.: Civil Engineering

Designation: ASSISTANT PROFESSOR

Actual Date of Completion & Remarks, if any

Units	Remarks	No. of Objectives Achieved	No. of Outcomes Achieved
Unit 1	Covered on time		
Unit 2	Covered on time		
Unit 3	Covered on time		
Unit 4	Covered on time		
Unit 5	Covered on time		

Signature of HOD

Signature of faculty

Date:

Date

GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING & TECHNOLOGY
Department of Civil Engineering
Result Analysis - BTech IV Yr - I Sem (GR15 Regular) 2021 - 22

Student's Batch 2014-18

Total Strength of the Class:

Academic Year : 2021 - 22

Semester : I

Name of the Program: M.Tech Structural Engineering

Year: II year - I Sem

Course/Subject: COST MANAGEMENT OF ENGINEERING PROJECTS

Course Code: GR20D5146

Name of the Faculty: Mr. AKULA PRAKASH

Dept.: Civil Engineering

S.No	Name of the Subject	Subject Code	No. of students appeared	No. of students Passed	No. of students Failed	≥ 70 %	60-69 %	40-59 %	Pass %
Theory									
1									

Subjects & Faculty Details

S.No	Name of the Subject	Faculty
1	COST MANAGEMENT OF ENGINEERING PROJECTS	Mr. AKULA PRAKASH

Arrear Position - Fourth Year Second Semester

Arrear Details					
Description	All Pass	One Arrears	Two Arrears	Three or more Arrears	% Pass
No. of Students					

Performance

Class Toppers (Three Positions)			
S.No	Name of the Student	Hall Ticket No.	% of Marks
1			
2			
3			

Overall Pass :

Passed in First class :

