



Sri Indu Institute of Engineering & Technology

Recognized Under 2(f) of UGC Act 1956

Approved by AICTE, New Delhi

Affiliated to JNTUH, Hyderabad.

COURSE FILE

ON
INDUSTRIAL MANAGEMENT
Course Code – MT600OE

III B.Tech II-SEMESTER

A.Y.: 2022-2023

Prepared by

Mrs. T.K.VENKATA NAGAMANI
Assistant Professor

Head of the Department
Electronics and Communication Engg. Dept
SRI INDU INSTITUTE OF ENGG & TECH
sherguda(V), Ibrahimpatnam(M), R.R.Dist-501 510

PRINCIPAL
Sri Indu Institute of Engineering & Tech.
Sheriguda(VIII), Ibrahimpatnam
R.R. Dist. Telangana-501 510.



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Academic Year	2022-2023
Course Title	INDUSTRIAL MANAGEMENT
Course Code	MT600OE
Programme	B.Tech
Year & Semester	III year II-semester
Branch & Section	ECE-A
Regulation	R18
Course Faculty	Mrs. T.K.VENKATA NAGAMANI, Assistant Professor

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INSTITUTE VISION AND MISSION

Vision:

To become a premier institute of academic excellence by providing the world class education that transforms individuals into high intellectuals, by evolving them as empathetic and responsible citizens through continuous improvement.

Mission:

IM1: To offer outcome-based education and enhancement of technical and practical skills.

IM2: To Continuous assess of teaching-learning process through institute-industry collaboration.

IM3: To be a centre of excellence for innovative and emerging fields in technology development with state-of-art facilities to faculty and students' fraternity.

IM4: To Create an enterprising environment to ensure culture, ethics and social responsibility among the stakeholders.

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

DEPARTMENT VISION AND MISSION

Vision:

To become a recognized center in the field of Electronics and Communication Engineering by producing creative engineers with social responsibility and address ever-changing global challenges.

Mission:

DM1: To facilitate an academic environment that enables student's centric learning.

DM2: To provide state-of-the-art hardware and software technologies to meet industry requirements.

DM3: To continuously update the Academic and Research infrastructure.

DM4: To Conduct Technical Development Programs for overall professional caliber of Stake Holders.

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PROGRAM EDUCATIONAL OBJECTIVES

Program Educational objectives are to Promote:

PEO1: Graduates with a strong foundation in Electronics and Communication Engineering, Science and Technology to become successful in the chosen professional career.

PEO2: Graduates with ability to execute innovative ideas for Research and Development with continuous learning.

PEO3: Graduates inculcated with industry based soft-skills to enable employability.

PEO4: Graduates demonstrate with ability to work in interdisciplinary teams and ethical professional behavior.

PROGRAM SPECIFIC OUTCOMES

PSO 1: Design Skills: Design, analysis and development a economical system in the area of Embedded system & VLSI design.

PSO 2: Software Usage: Ability to investigate and solve the engineering problems using MATLAB, Keil and Xilinx.

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PROGRAM OUTCOMES

- 1. ENGINEERING KNOWLEDGE:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. PROBLEM ANALYSIS:** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. DESIGN/DEVELOPMENT OF SOLUTIONS:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. MODERN TOOL USAGE:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- 6. THE ENGINEER AND SOCIETY:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7. ENVIRONMENT AND SUSTAINABILITY:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. ETHICS:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. INDIVIDUAL AND TEAM WORK:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. COMMUNICATION:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, give and receive clear instructions.
- 11. PROJECT MANAGEMENT AND FINANCE:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. LIFE-LONG LEARNING:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

**JAWAHARLAL NEHRU TECHNOLOGICAL
UNIVERSITY HYDERABAD B.Tech. in
ELECTRONICS AND COMMUNICATION
ENGINEERING COURSE STRUCTURE &
SYLLABUS (R18)**

Applicable From 2018-19 Admitted Batch

III YEAR I SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
1	EC501PC	Micro processors & Microcontrollers	3	1	0	4
2	EC502PC	Data Communications and Networks	3	1	0	4
3	EC503PC	Control Systems	3	1	0	4
4	SM504MS	Business Economics & Financial Analysis	3	0	0	3
5		Professional Elective-I	3	0	0	3
6	EC505PC	Microprocessors & Micro controllers Lab	0	0	3	1.5
7	EC506PC	Data Communications and Networks Lab	0	0	3	1.5
8	EN508HS	Advanced Communication Skills Lab	0	0	2	1
9	*MC510	Intellectual Property Rights	3	0	0	0
		Total Credits	18	3	8	22

III YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	EC601PC	Antennas and Propagation	3	1	0	4
2	EC602PC	Digital Signal Processing	3	1	0	4
3	EC603PC	VLSI Design	3	1	0	4
4		Professional Elective - II	3	0	0	3
5	MT600OE	Open Elective – I (INDUSTRIAL MANAGEMENT)	3	0	0	3
6	EC604PC	Digital Signal Processing Lab	0	0	3	1.5
7	EC605PC	e – CAD Lab	0	0	3	1.5
8	EC606PC	Scripting Languages Lab	0	0	2	1
9	*MC609	Environmental Science	3	0	0	0
		Total Credits	18	3	8	22

MT600OE: INDUSTRIAL MANAGEMENT (Open Elective – I)

B.Tech. Mechatronics III Year II Sem.

**L T P
C3 0 0 3**

UNIT- I

Introduction to Management: Entrepreneurship and organization – Nature and Importance of Management, Functions of Management, Taylor’s Scientific Management Theory, Fayol’s Principles of Management, Maslow’s Theory of Human Needs, Douglas McGregor’s Theory X and Theory Y, Herzberg’s Two-Factor Theory of Motivation, Systems Approach to Management, Leadership Styles, Social responsibilities of Management

UNIT - II

Designing Organizational Structures: Departmentalization and Decentralization, Types of Organization structures – Line organization, Line and staff organization, functional organization, Committee organization, matrix organization, Virtual Organization, Cellular Organization, team structure, boundary less organization, inverted pyramid structure, lean and flat organization structure and their merits, demerits and suitability.

UNIT - III

Operations Management: Objectives- product design process- Process selection-Types of production system(Job, batch and Mass Production), Plant location-factors- Urban-Rural sites comparison- Types of Plant Layouts- Design of product layout- Line balancing(RPW method) Value analysis-Definition-types of values- Objectives- Phases of value analysis- Fast diagram

UNIT - IV:

Work Study: Introduction — definition — objectives — steps in work study — Method study — definition, objectives — steps of method study. Work Measurement — purpose — types of study — stop watch methods — steps — key rating — allowances — standard time calculations — work sampling.

Statistical Quality Control: variables-attributes, Shewart control charts for variables- chart, R chart, –Attributes- Defective-Defect- Charts for attributes-p-chart -c chart (simple Problems), Acceptance Sampling- Single sampling- Double sampling plans-OC curves.

UNIT - V

Job Evaluation: Methods of job evaluation — simple routing objective systems — classification method factor comparison method, point method, benefits of job evaluation and limitations. **Project Management (PERT/CPM):** Network Analysis, Programme Evaluation and Review Technique (PERT), Critical Path Method (CPM), Identifying critical path, Probability of Completing the project within given time, Project Cost Analysis, Project Crashing. (simple problems)

TEXT BOOKS

1. Industrial Engineering and Management/O.P. Khanna/Khanna Publishers.
2. Industrial Engineering and Management Science/T.R. Banga and S.C. Sarma /Khanna Publishers.

REFERENCE BOOKS

1. Industrial Engineering Management/NVS Raju/Cengage Learning.
2. Industrial Engineering Hand Book/Maynard.
3. Industrial Engineering Management I Ravi Shankar/ Galgotia



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Website: <https://siiet.ac.in/>

COs and Mapping with PO/PSO

Course: INDUSTRIAL MANAGEMENT (C325)

Class: III ECE-A

Course Outcomes

CO Number	Course Outcomes (CO)
C325.1	Explain the concepts of management and Explore the Management practices in their domain area within society.
C325.2	Evaluate different types of organizational structures and Design them.
C325.3	Explain about product design process and Design product layout.
C325.4	Explain about method study and Use various work measurement Methods.
C325.5	Draw various statistical quality control charts and Interpret them.
C325.6	Apply the techniques of PERT/CPM in project.

Mapping of course outcomes with program outcomes:

	Program Outcomes (PO's)												PSO I	PSOI I
	PO1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12		
C325.1	1	2	2	-	-	1	1	1	3	3	1	1	-	-
C325.2	-	1	2	-	-	-	-	-	1	2	-	1	-	-
C325.3	3	3	3	1	1	-	-	-	-	1	-	2	-	-
C325.4	3	3	2	1	1	-	-	-	1	2	-	1	-	-
C325.5	3	3	1	3	1	-	-	-	1	1	-	1	-	-
C325.5	2	3	2	-	2	-	-	-	1	1	3	1	-	-
C325	2.4	2.5	2	1.6	1.2	1	1	1	1.4	1.6	2	1.1	-	-



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CO- PO/PSO Mapping - Justification

Course: **INDUSRIAL MANAGEMENT (C325)**

Class: **III ECE-A**

P01.ENGINEERING KNOWLEDGE: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

P02.PROBLEM ANALYSIS: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

P03. DESIGN/DEVELOPMENT OF SOLUTIONS: Design solutions for complex engineering problems and design system components or processes that meet t h e specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5. MODERN TOOL USAGE: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6. THE ENGINEER AND SOCIETY: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7. ENVIRONMENT AND SUSTAINABILITY: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8. ETHICS: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9. INDIVIDUAL AND TEAM WORK: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10. COMMUNICATION: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, give and receive clear instructions.

PO11. PROJECT MANAGEMENT AND FINANCE: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12. Life-long learning: Recognize the need for, and have the preparation and ability to

engage in independent and life-long learning in the broadest context of technological change

CO-PO mapping Justification

C325.1 Explain the concept of management and explore the Management practices in their domain area within society.

	Justification
PO1	In engineering management, planning involves setting project goals, defining scope, estimating resources, and creating schedules
PO2	Researching literature is a critical aspect of understanding existing solutions, best practices, and industry standards.
PO3	Engineering projects often operate within diverse cultural and societal contexts. Management practices involve understanding and incorporating cultural and societal considerations into the design process
PO6	Managers prioritize health and safety in engineering practices, ensuring that projects adhere to safety standards, minimize risks, and prioritize the well-being of individuals and communities.
PO7	Engineering managers promote the knowledge of and need for sustainable development within their teams.
PO8	Managers guide engineering teams in making ethical decisions throughout the project lifecycle
PO9	Management practices foster collaboration by promoting effective communication, acknowledging diverse perspectives, and creating an inclusive environment.
PO10	Managers guide teams in creating and delivering effective presentations. This involves structuring information, using appropriate
PO11	Management practices promote adaptability in multidisciplinary settings.
PO12	Management practices encourage teams to recognize the importance of continuous learning in the face of technological change.

C325.2. Evaluate different types of organizational structures and Design them.

	Justification
PO2	The functional structure facilitates in-depth analysis of engineering problems by providing specialists with the resources and support they need within their respective disciplines
PO3	The network structure facilitates the design of engineering solutions that meet specified needs by enabling access to specialized expertise and resources
PO9	The matrix structure provides individuals with opportunities to work in diverse teams and multidisciplinary settings, facilitating the integration of different perspectives and expertise. As team members or leaders, individuals learn to navigate complex relationships and coordinate efforts across functional boundaries.
PO10	The matrix structure encourages individuals to communicate effectively across functional boundaries and collaborate with diverse teams, enhancing their ability to convey complex engineering activities to a broader audience.
PO12	The network structure facilitates independent and lifelong learning by connecting individuals with a wide range of external resources, including industry experts, research institutions, educational providers, and professional associations

C325.3. Explain about product design process and Design product layout.

PO1	The charging station layout is designed to accommodate multiple vehicles simultaneously, with various charging options (e.g., fast charging, standard charging) to cater to different needs
PO2	The objective is to design an efficient layout that optimizes workflow, minimizes production time, and ensures safety and quality in EV manufacturing.
PO3	In this stage, designers brainstorm and generate ideas for the product. Sketches, prototypes, and design thinking methodologies are employed to explore different concepts and possibilities.
PO4	Both the product design process and the design of the product layout are justified by the application of research-based knowledge and research methods, including design of experiments, analysis, and interpretation of data, and synthesis of information to provide valid conclusions.
PO5	Both the product design process and the design of product layouts are justified by the application of appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, with an understanding of their limitations.
PO10	Effective communication is essential in both the product design process and the design of product layouts to ensure that complex engineering activities are understood, aligned with stakeholder needs, and executed successfully.
PO12	In both the product design process and the design of product layouts, the recognition of the need for and the preparation and ability to engage in independent and lifelong learning are essential for engineers to stay relevant and effective in the face of technological change.

C325.4. Explain about method study and Use various work measurement Methods.

PO1	Engineers apply their knowledge of fundamental concepts such as time-motion studies, process flow analysis, and resource allocation to devise efficient work methods and accurately measure work performance.
PO2	Engineers identify and formulate complex engineering problems related to inefficient work processes and productivity issues.
PO3	Engineers prioritize public health and safety throughout the method study and work measurement processes by identifying potential hazards, implementing safety measures, and ensuring compliance with regulations and standards.
PO4	Engineers design experiments to systematically test hypotheses and evaluate different methods or techniques for improving work processes and measuring task times.
PO5	Prediction and modeling techniques help engineers forecast the impact of proposed process improvements and estimate task times and resource requirements more accurately.
PO9	Engineers in leadership roles guide and coordinate team efforts in method study and work measurement activities.
PO10	Method study and work measurement findings are often documented in reports and documentation
PO12	Method study and work measurement methods instill a mindset of continuous improvement, prompting engineers to seek out opportunities for learning and development to enhance their skills and knowledge.

C325. Draw various statistical quality control charts and Interpret them

PO1	Different engineering disciplines may use specific types of control charts based on the nature of the processes they manage.
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PO2	By utilizing statistical quality control charts and applying the principles of mathematics, natural sciences, and engineering sciences, engineers can effectively identify, formulate, and analyze complex engineering problems related to process control and quality.
PO3	Utilizing statistical quality control charts is integral to designing solutions for complex engineering problems. By interpreting these charts, engineers can ensure that system components or processes meet specified needs with considerations for public health and safety, as well as cultural, societal, and environmental aspects.
PO4	By utilizing statistical quality control charts and applying research-based knowledge and methods, engineers can effectively design experiments, analyze data, and draw valid conclusions about complex engineering problems.
PO5	Utilizing statistical quality control charts aligns with the program outcome by demonstrating the creation, selection, and application of appropriate techniques, resources, and modern engineering and IT tools.
PO9	Utilizing statistical quality control charts requires both individual and collaborative efforts. Engineers function effectively individually by independently interpreting the charts and making decisions.
PO10	Utilizing statistical quality control charts involves effective communication in various forms, aligning with the program outcome. Engineers comprehend and write reports and design documentation by summarizing complex information from SQC charts.
PO12	Interpreting statistical quality control charts requires continuous learning and adaptation to technological changes. Engineers need to recognize shifts and patterns, prompting them to engage in independent learning.

C325.6. Apply the techniques of PERT/CPM in project

PO1	The application of PERT/CPM techniques in project management demonstrates the integration of mathematical, scientific, and engineering knowledge to solve complex engineering problems.
PO2	The application of PERT/CPM techniques in project management reflects the identification, formulation, and analysis of complex engineering problems.
PO3	Applying PERT/CPM techniques in project management ensures that engineers design solutions for complex engineering problems, design system components efficiently, and meet specified needs while considering public health and safety, as well as cultural, societal, and environmental considerations.
PO5	The application of PERT/CPM techniques in project management aligns with the specified program outcome by demonstrating the creation, selection, and application of appropriate techniques, resources, and modern engineering and IT tools.
PO9	The application of PERT/CPM techniques in project management supports the development of engineering professionals who can function effectively at different levels and in various settings.
PO10	The application of PERT/CPM techniques in project management supports effective communication on complex engineering activities
PO11	Applying PERT/CPM techniques in project management is a demonstration of knowledge and understanding of engineering and management principles.
PO12	The use of PERT/CPM techniques in project management reinforces the recognition of the need for, and the preparation and ability to engage in independent and life-long learning.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

ACADEMIC CALENDAR 2022-23

B. Tech./B. Pharm. III YEAR I & II SEMESTERS

I SEM

S. No	Description	Duration	
		From	To
1	Commencement of I Semester classwork	09.09.2022	
2	1 st Spell of Instructions (including Dussehra Recess)	09.09.2022	10.11.2022 (9 Weeks)
3	Dussehra Recess	03.10.2022	08.10.2022 (1 Week)
4	First Mid Term Examinations	11.11.2022	17.11.2022 (1 Week)
5	Submission of First Mid Term Exam Marks to the University on or before	24.11.2022	
6	2 nd Spell of Instructions	18.11.2022	12.01.2023 (8 Weeks)
7	Second Mid Term Examinations	16.01.2023	21.01.2023 (1 Week)
8	Preparation Holidays and Practical Examinations	23.01.2023	28.01.2023 (1 Week)
9	Submission of Second Mid Term Exam Marks to the University on or before	30.01.2023	
10	End Semester Examinations	30.01.2023	11.02.2023 (2 Weeks)

Note: No. of Working/ instructional days: 92

II SEM

S. No	Description	Duration	
		From	To
1	Commencement of II Semester classwork	13.02.2023	
2	1 st Spell of Instructions	13.02.2023	08.04.2023 (8 Weeks)
3	First Mid Term Examinations	10.04.2023	15.04.2023 (1 Week)
4	Submission of First Mid Term Exam Marks to the University on or before	22.04.2023	
5	2 nd Spell of Instructions (including Summer Vacation)	17.04.2023	24.06.2023 (10 Weeks)
6	Summer Vacation	15.05.2023	27.05.2023 (2 Weeks)
7	Second Mid Term Examinations	26.06.2023	01.07.2023 (1 Week)
8	Preparation Holidays and Practical Examinations	03.07.2023	08.07.2023 (1 Week)
9	Submission of Second Mid Term Exam Marks to the University on or before	08.07.2023	
10	End Semester Examinations	10.07.2023	22.07.2023 (2 Weeks)

Note: No. of Working/ instructional days: 90


 REGISTRAR



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Class Timetable

CLASS: III-B.Tech ECE-A

A.Y:2022-23

SEMESTER: II

LH: C-201

TIME/ DAY	I 9:40-10:30	II 10:30-11:20	III 11:20-12:10	IV 12:10-1:00	1:00- 1:30	V 1:30-2:20	VI 2:20-3:10	VII 3:10-4:00
MON	A&P	DSP LAB / e-CAD LAB			L U N C H	VLSID	ESD	LIB
TUE	IM	DSP	FAI	ESD		DSP(T)/VLSID(T)	A&P	SPORTS
WED	ESD	IM	A&P	A&P(T)/DSP(T)		FAI	DSP	COUN
THU	IM	DSP	VLSID	VLSID(T)/A&P(T)		e-CAD LAB / DSP LAB		
FRI	FAI	DSP	A&P	VLSID		ESD	CO-CU/DAA	
SAT	VLSID	ESD	VLSID(ADJUNCT)			SL LAB	A&P	

*(T) - Tutorial Concern Faculty

Course Code	Course Name	Name of the Faculty	Course Code	Course Name	Name of the Faculty
EC601PC	A&P-Antennas and Propagation	P.Krishna Rao	EC604PC	DSP LAB-Digital Signal Processing Lab	Y.Raju/Dr.T.Ramakrishna/Dr.S.Anjaneyulu
EC602PC	DSP-Digital Signal Processing	Y.Raju	EC605PC	e-CAD LAB-e - CAD Lab	S.Alekha/P.Rajendru/P.Krishna
EC603PC	VLSID-VLSI Design	S.Alekha	EC606PC	SL LAB-Scripting Languages Lab	D.Nagaraju/P.Krishna Rao/K.Bhaskar Reddy
EC613PE	ESD-Embedded System Design(Professional Elective-II)	A.Vaani	COUN	FAI-Fundamentals of Artificial Intelligence	P.Meena
VLSID (ADJUNCT)	VLSID(ADJUNCT)	G.Chandrasekhar	SPORTS	Counseling	Y.Raju/K.Padma/G.Swathi
MT600OE	IM-Industrial Management (Open Elective-I)	K.V.Nagamani	CO-CU/DAA	Sports	P.Srilatha/B.Ashwini
			LIB	Co-Curricular/Dept. Assoc.Activities	S.Alekha/S.Naresh/K.Bhaskar Reddy
				Library	G.Nirmala/A.Swetha

Class Incharge

Head of The Department
Head of the Department
 Electronics and Communication Engg. Dept
 INSTITUTE OF ENGG & TECH.

Principal
 Sri Indu Institute of Engineering & Tech.
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LESSON PLAN

Programme: B.Tech	Academic Year: 2022-23
Year: III	Semester: II
Course title: INDUSTRIAL MANAGEMENT	Course code: MT600OE
Name of Faculty: T.K.VENKATA NAGAMANI	

UNIT- I

Introduction to Management: Entrepreneurship and organization – Nature and Importance of Management, Functions of Management, Taylor’s Scientific Management Theory, Fayol’s Principles of Management, Maslow’s Theory of Human Needs, Douglas McGregor’s Theory X and Theory Y, Herzberg’s Two-Factor Theory of Motivation, Systems Approach to Management, Leadership Styles, Social responsibilities of Management

No. of Sessions Planned	Topics	Reference	Teaching Method/ Aids
1	Entrepreneurship and organization	T2	BB
1	Nature and Importance of Management, Functions of Management,	T2	BB
1	Taylor’s Scientific Management Theory,	T2	BB
1	Fayol’s Principles of Management,	T2	BB
1	Maslow’s Theory of Human Needs,	T2	BB,PPT
1	Douglas McGregor’s Theory X and Theory Y,	T1	BB
1	Herzberg’s Two-Factor Theory of Motivation	T1	BB
1	Systems Approach to Management,	T1	BB
1	Leadership Styles,	T1	BB
1	Social responsibilities of Management	T1	BB

Gap beyond syllabus(if any):

Gap within the syllabus(if any)

Course Outcome 1: Explain the concepts of management and Explore the Management practices in their domain area within society.

*Session Duration: 50 minutes

*Total Number of Hours/Unit: 10



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Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

UNIT - II

Designing Organizational Structures: Departmentalization and Decentralization, Types of Organization structures – Line organization, Line and staff organization, functional organization, Committee organization, matrix organization, Virtual Organization, Cellular Organization, team structure, boundary less organization, inverted pyramid structure, lean and flat organization structure and their merits, demerits and suitability.

No. of Sessions Planned	Topics	Reference	Teaching Method/Aids
1	Departmentalization and Decentralization	T1	BB
1	Types of Organization structures – Line organization,	T2	BB,PPT
1	Line and staff organization	T2	BB
1	functional organization, Committee organization	T2	BB
1	matrix organization, Virtual Organization	T2	BB
1	Cellular Organization	T2	BB
1	team structure	T2	BB
1	boundary less organization	T1	BB
1	inverted pyramid structure	T2	BB
1	lean and flat organization structure	T1	BB
1	their merits, demerits and suitability	T2	BB
Gap beyond syllabus (if any):			
Gap within the syllabus (if any)			
Course Outcome 2: Explain about product design process and Design product layout			

*Session Duration: 50 minutes

*Total Number of Hours/Unit: 11



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UNIT - III

Operations Management: Objectives- product design process- Process selection-Types of production system(Job, batch and Mass Production),Plant location-factors- Urban-Rural sites comparison- Types of Plant Layouts- Design of product layout- Line balancing(RPW method) Value analysis-Definition-types of values- Objectives- Phases of value analysis- Fast diagram

No. of Sessions Planned	Topics	Reference	Teaching Method/ Aids
1	Objectives- product design process	T1	BB
2	Process selection-Types of production system(Job, batch and Mass Production),	T1	BB
1	Plant location-factors	T1	BB
1	Urban-Rural sites comparison	T1	BB
1	Types of Plant Layouts	T1	BB,PPT
2	Design of product layout- Line balancing(RPW method)	T1	BB
2	Value analysis-Definition-types of values- Objectives-	T1	BB
1	Phases of value analysis- Fast diagram	T1	BB
Gap beyond syllabus(if any):			
Gap within the syllabus(if any)			
Course Outcome 3 : Explain about method study and Use various work measurement Methods.			

*Session Duration: 50minutes

*Total Number of Hours/Unit: 11



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UNIT - IV:

Work Study: Introduction — definition — objectives — steps in work study — Method study — definition, objectives — steps of method study. Work Measurement — purpose — types of study — stop watch methods — steps — key rating — allowances — standard time calculations — work sampling.

Statistical Quality Control: variables-attributes, Shewart control charts for variables- chart, R chart, –Attributes- Defective-Defect- Charts for attributes-p-chart -c chart (simple Problems), Acceptance Sampling- Single sampling- Double sampling plans-OC curves.

No. of Sessions Planned	Topics	Reference	Teaching Method/ Aids
2	Introduction — definition — objectives — steps in work study	T2	BB
2	Method study — definition, objectives — steps of method study.	T1	BB
2	Work Measurement — purpose — types of study — stop watch methods	T2	BB,PPT
2	steps — key rating — allowances — standard time calculations	T2	BB
2	Work sampling.	T2	BB
2	variables-attributes, Shewart control charts for variables-	T2	BB
2	chart, R chart, –Attributes- Defective-Defect- Charts for attributes-p-chart -c chart (simple Problems),	T2	BB
2	Acceptance Sampling- Single sampling- Double sampling plans-OC curves.		
Gap beyond syllabus(if any):			
Gap within the syllabus(if any)			
Course Outcome 4: Draw various statistical quality control charts and Interpret them.			

*Session Duration: 50minutes

*Total Number of Hours/Unit: 16



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UNIT - V

Job Evaluation: Methods of job evaluation — simple routing objective systems — classification method factor comparison method, point method, benefits of job evaluation and limitations. **Project Management (PERT/CPM):** Network Analysis, Programme Evaluation and Review Technique (PERT), Critical Path Method (CPM), Identifying critical path, Probability of Completing the project within given time, Project Cost Analysis, Project Crashing. (simple problems)

No. of Sessions Planned	Topics	Reference	Teaching Method/ Aids
1	Methods of job evaluation	T2	BB,PPT
2	simple routing objective systems — classification method factor comparison method,	T2	BB
2	point method, benefits of job evaluation and limitations.	T2	BB
2	Network Analysis, Programme Evaluation and Review Technique (PERT),	T1	BB
2	Critical Path Method (CPM), Identifying critical path, Probability of Completing the project within given time,	T1	BB
2	Project Cost Analysis,	T1	BB
3	Project Crashing. (simple problems)	T2	BB
Gap beyond syllabus(if any):			
Gap within the syllabus(if any)			
Course Outcome 5: Apply the techniques of PERT/CPM in project.			

*Session Duration: 50minutes

*Total Number of Hours/Unit: 14

TEXT BOOKS:

1. D. D. Chaturvedi, S. L. Gupta, Business Economics - Theory and Applications, International Book House Pvt. Ltd. 2013.
2. Dhanesh K Khatri, Financial Accounting, Tata Mc –Graw Hill, 2011.
3. Geethika Ghosh, Piyali Gosh, Purba Roy Choudhury, Managerial Economics, 2e, Tata McGraw Hill Education Pvt. Ltd. 2012.

REFERENCE BOOKS:

1. Paresh Shah, Financial Accounting for Management 2e, Oxford Press, 2015.
2. S. N. Maheshwari, Sunil K Maheshwari, Sharad K Maheshwari, Financial Accounting, 5e, Vikas Publications, 2013.



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WEB REFERENCES:

± S.No.	Web Link
1	https://byjus.com/commerce/taylor-principles-of-scientific-management/
2	https://fourweekmba.com/virtual-organizational-structure/
3	https://www.uagc.edu/blog/what-operations-management
4	https://www.businessmanagementideas.com/production-management/work-measurement/time-study-definition-procedure-and-methods/7162
5	https://pmstudycircle.com/pert-program-evaluation-and-review-technique/



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Lecture notes

Unit 1 LINK:

https://drive.google.com/file/d/1Hc8uU3FFJQAtJnF2APPlqx_1i6Nv_BFO/view?usp=sharing

UNITS 2-5 LINK:

<https://drive.google.com/file/d/1urwiplbhHa4uDI4qW2d4OenaeghFWJH1/view?usp=sharing>



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Power point presentation

PPT link:

UNIT 1

https://drive.google.com/file/d/1Z0u3s49qYwbMZAwaHYq0ztc_n_noxdt/view?usp=sharing

UNIT 2

<https://drive.google.com/file/d/1NT1NjszpMTTrhtscs-IYZGcAalQ2k2xKb/view?usp=sharing>

UNIT 3

<https://drive.google.com/file/d/1FtqJI-dJObgy4IY9EnVJTf5ukLDPgAOk/view?usp=sharing>

UNIT 4

https://drive.google.com/file/d/1s5_tW7mq5Q4Qz5GnBibXpfbVJ4gBCutB/view?usp=sharing

UNIT 5

https://drive.google.com/file/d/1Qh8UJp308_7jTAvSP_aARFM-9QEHENHK/view?usp=sharing

R18

Code No: 156DV

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, August - 2022

INDUSTRIAL MANAGEMENT

(Common to CE, ME, ECE)

Time: 3 Hours

Max.Marks:75

**Answer any five questions
All questions carry equal marks**

- - -

- 1.a) Differentiate between Herzberg's Need Hierarchy and Maslow's Need Hierarchy. Explain.
- b) What are the various factors which act as barriers to effective planning? [8+7]
- 2.a) Explain the Taylor's scientific management theory in brief.
- b) Discuss the leadership styles with illustrations. [8+7]
- 3.a) Explain span of control and types of spans present in an organization structure.
- b) Explain briefly line and organization structure of any manufacturing organization. [7+8]
- 4.a) Explain briefly cellular organization and virtual organization.
- b) Explain briefly lean and flat organization structure and discuss its advantage and disadvantages. [7+8]
- 5.a) Discuss briefly phase value analysis and explain Fast diagram.
- b) Explain the urban and rural sties comparison based on plant location. [7+8]
- 6.a) What are the different types of values? Explain each of them.
- b) What is the difference between batch and mass production? Explain with example. [7+8]
- 7.a) Explain briefly the objectives of the method study. Explain the steps involved.
- b) What is the importance of work measurement? Explain with example. [8+7]
- 8.a) What is standard costing? How does it help in keeping the cost within control?
- b) What do you mean by PERT and CPM? What are their uses in managerial planning and control? [7+8]

---oo0oo---

Code No: 156DV**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year II Semester Examinations, August/September - 2021****INDUSTRIAL MANAGEMENT****(Common to CE, ME, ECE, MIE)****Time: 3 Hours****Max. Marks: 75****Answer any five questions
All questions carry equal marks**

- - -

- 1.a) Discuss the principles of Taylor's Scientific Management and explain the limitations.
- b) Explain the functions of management and discuss the role of a manager. [8+7]
- 2.a) Discuss the role of a leader in the 21st century world related to manufacturing industry.
- b) Explain the importance of Hertz Berg's two factor theory. [8+7]
- 3.a) What is departmentation? Explain the bases of departmentation.
- b) What are the advantages and disadvantages of lean and flat organization structure? Explain. [7+8]
- 4.a) Decentralization is more effective than centralization. Comment on the statement.
- b) Explain functional organization, committee organization with their merits and demerits. [7+8]
- 5.a) Explain Job and Batch production along with merits and demerits.
- b) Explain the types of value analysis and discuss their major applications. [7+8]
- 6.a) Discuss the types of plant layout with suitable examples and discuss the applications.
- b) What are the objectives of values analysis? Describe. [8+7]
- 7.a) Define work study. Explain the steps in work study along with their importance.
- b) What are control charts for attributes? Explain with examples. [8+7]
- 8.a) Explain the assumptions of PERT and CPM.
- b) Discuss how project cost analysis helps in completing the project. [7+8]

---ooOoo---

Code No: 156DV

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**B. Tech III Year II Semester Examinations, February/March - 2022****INDUSTRIAL MANAGEMENT****(Common to CE, EEE, ME, ECE, CSE, IT)****Time: 3 hours****Max. Marks: 75**

Answer any five questions
All questions carry equal marks

- - -

- 1.a) Briefly explain your understanding of corporate social responsibility.
 b) What are the implications of Herzberg's two factor theory of motivation? [8+7]
- 2.a) Distinguish between Democratic style of leadership and Laissez Faire style of leadership.
 b) What do you understand by inverted pyramid organization structure? [8+7]
- 3.a) What is a team? What are the benefits of team structure organization?
 b) Explain the difference between line and staff authority. [8+7]
- 4.a) With examples, illustrate the nature of mass production system and distinguish it from batch production system.
 b) What are the advantages and disadvantages of rural sites for location of plants? [8+7]
- 5.a) How can value analysis help an organization becoming competitive?
 b) Explain the basic procedure of method study and work measurement. [7+8]
- 6.a) A time study was conducted on a job consisting of three elements. The stopwatch readings of the first five cycles using cumulative timing method are given below:

Element	Stopwatch readings in hundredth of a minute				
	1	2	3	4	5
A	10	73	139	203	266
B	25	88	155	218	280
C	64	128	193	257	320

The rating factors were estimated at 80,100, and 110 for the three elements respectively (on the rating scale 100 corresponding to normal performance). The allowance for personal needs, rest etc. amount to 12%. Calculate the standard time for the job.

- b) What are OC curves? [10+5]
- 7.a) What is inspection by variables? What is inspection by attributes? What are the control charts used for these?
 b) What is factor comparison method of job evaluation? What are the steps involved? [7+8]

8. The following data pertains to a project network.

Activity	Normal duration in weeks	Normal cost in Rs.	Crash duration in weeks	Crash cost in Rs.
1--2	4	8000	3	15,500
1--3	8	5000	5	9,500
2--3	6	7000	4	9,000
2--4	9	9000	7	16,000
3--4	5	6000	3	12,000

The indirect cost of the project is Rs.3000 per week. Determine the optimum cost and the optimum duration of the project. Also draw the least cost network. [15]

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SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Sheriguda (v), Ibrahimpatnam (m), RR.DIST501510

MID I Examination, April-2023

SET-1

Year Branch—III-ECE (A)

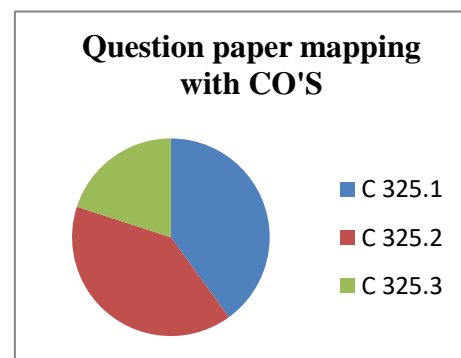
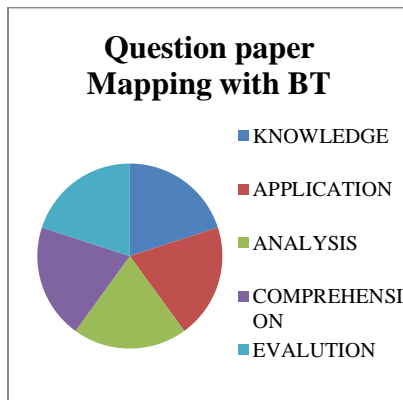
Date: 12/4/2023

Subject: IM

max, marks: 10Time:60mins

Answer any TWO Questions All Questions carry Equal Marks

1. Explain Fayol's Principles of Management. C 325.1 (Comprehension)
2. Discuss the characteristics of management as a profession. To what extent has India's management been professionalized? C 325.1 (Evaluation)
3. a) What are the steps involved for designing an organization structure? Explain. (b)Distinguish between the departmentalization and decentralization. C 325.2 (Analysis)
4. (a) What are the objectives of line-balancing?
(b) State the steps involved in RPW method for line balancing problem. C 325.2 (Knowledge)
5. (a) State the advantages of suburban area as a site for industry. (b) Describe the product layout with a neat sketch and state its advantages and limitations. C 325.3 (Application)



Sri Indu Institute of Engineering & Technology

Sheriguda (v), Ibrahimpatnam (M), R.R.Dist-501510

II - Mid Examination, JUNE – 2023 SET-1

Year & Branch: III–ECE (A)

Date: 28/6/2023

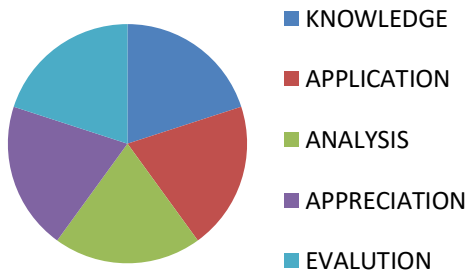
Subject: INDUSTRIAL MANAGEMENT

Max, marks: 10 Time: 60mins

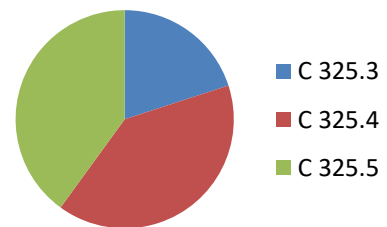
Answer any TWO Questions. All Question carry Equal Marks

- 1) What are the advantages of job and batch production? C325.3 (Comprehension)
- 2) (a) State the advantages of suburban area as a site for industry. (b) Describe the product layout with a neat sketch and state its advantages and limitations. C325.4 (Application)
- 3) (a) Describe the various factors to be considered in selecting the actual site in a particular locality. (b) Differentiate between process layout and product layout. C325.4 (Analysis)
- 4) Critically examine and explain the trade-off in network crashing. C 325.5 (Evaluation)
- 5) What is project management and what are its objectives? C325.5 (Knowledge)

Question paper Mapping wth BT



Question paper mapping with CO'S



Sri Indu Institute of Engineering & Technology
III B.Tech ECE II Sem., I mid – Term Examinations, APRIL- 2023

INDUSTRIAL MANGEMENT

Objective Exam

Branch Name: ECE

Hall Ticket No. I

--	--	--	--	--	--	--	--	--	--

CHOOSE THE CORRECT ALTERNATIVE:

1. By profession, FW Taylor was a ()
 - (a) Mechanical engineer
 - (b) Mining engineer
 - (c) Psychologist
 - (d) Human resource officer

2. The principles of pure science are considered to be _____ in nature. ()
 - (a) Flexible
 - (b) Rigid
 - (c) Creative
 - (d) None of the above()

3. 'Rule of thumb' refers to
 - (a) Use of personal judgment in handling management issues
 - (b) Adopting a hit-and-trial approach to resolve management problems
 - (c) Both of the above
 - (d) None of the above

4. The form of organization known for giving rise to rumors is called ()
 - (a) Centralized organization
 - (b) Decentralized organization
 - (c) Formal organization
 - (d) Informal organization

5. Identify the type of organizational structure which facilitates occupational specialization ()
 - (a) Functional structure
 - (b) Horizontal structure
 - (c) Network structure
 - (d) Divisional structure

6. The following is also known as Military organization ()
 - (a) Line organization
 - (b) Functional organization
 - (c) Line and staff organization
 - (d) None of the above

7. In line organization, the business activities are divided into following three types ()
 - (A) Accounts, Production, Sales
 - (B) Production, Quality, Sales
 - (C) Production, Quality, Maintenance

(D) Production, Maintenance, Sales

8. In which of the following organization structure, each specialist is supposed to give his functional advice to all other foremen and workers ()

(A) Line organization

(B) Functional organization

(C) Line and staff organization

(D) All of the above

9. What type of process would a fertilizer plant be most likely to use ()

A. Continuous.

B. Project.

C. Job.

D. Flow shop.

10. What are the two basic types of production systems? ()

A. Automated and manual.

B. Intermittent and non-intermittent process.

C. Normal and continuous process.

D. Continuous process and batch.

II: FILL IN THE BLANKS:

1. _____ is recruitment of right people at right place in an organization.

2. Food, Water, Shelter are _____ needs.

3. Fayol suggested that organizations can be subdivided into _____ main groups of activity.

4. _____ is the formal arrangement of jobs within an organization.

5. Organizational design is based on decisions about _____.

6. Functional departmentalization groups jobs by _____.

7. Departmentalization based on _____ groups' jobs is based on the territory or physical Location.

8) _____ departmentalization is based on the product or customer flow through the organization.

9. The process of comparing outputs to previously established standards to determine if corrective action is Needed is called-----

10. Measurements taken at various points in the transformation process for control purposes are called-----

Sri Indu Institute of Engineering & Technology

III B.Tech ECE II Sem., II mid – Term Examinations, JUNE- 2023

INDUSTRIAL MANGEMENT

Objective Exam

Branch Name: ECE

Hall Ticket No.

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I CHOOSE THE CORRECT ALTERNATIVE:

1. What type most likely to use of process would a fertilizer plant be
 - a) Continuous.
 - b) Project.
 - c) Job.
 - d) Flow shop.
2. Poor quality adversely affects:
 - a) Costs.
 - b) Productivity.
 - c) Profitability.
 - d) All of the given options.
3. What name is often given to processes which involve the manufacture of a unique item from beginning to end?
 - a) Jobbing processes.
 - b) Continuous processes.
 - c) Lean production processes.
 - d) None of the above
4. Work study involves
 - a) only method study
 - b) only work measurement
 - c) method study and work measurement
 - d) only motion study
5. Work study consists of
 - a) Effective use of plant and equipment
 - b) Effective use of human effort
 - c) Evaluation of human work
 - d) All of the above
6. Work study examines
 - a) Method
 - b) Duration of work

- c) Both a & b
- d) None of the above

7. Which of the following are not the qualities of work study man?

- a) Sufficient understanding of Technical & administrative matters.
- b) He should be reliable and faith full
- c) He should be sentimental and sympathetically
- d) None of the above

8. The basic managerial skill(s)is(are)

- a) To supervise
- b) To motivate
- c) To stimulate
- d) All of these

9. Strategic Human resource management is

- a) proactive
- b) reactive
- c) both
- d) None of these

10. Job evaluation is based on the:

- a) Complexity of the job to perform
- b) Conceptual skill required by the job
- c) Relative job worth for an organization
- d) Physical skills required by the job

II: FILL IN THE BLANKS:

1. Production systems with customized outputs typically have relatively-----
2. The process of comparing outputs to previously established standards to determine if corrective action is needed is called.....
3. Manufacturing work sent to other countries is called-----
4. _____ is a performance measure of both efficiency and effectiveness.
5. _____ is a method used in group or organizational training needs assessment?
6. _____ forecasting technique is the fastest?
7. The human resource Management helps to improve the _____
8. CPM is the-----
9. PERT is the
10. PERT stands for-----

Sri Indu Institute of Engineering & Technology
Sheriguda (V), Ibrahimpatnam (M), R.R.Dist-501510
B-TechI-MidExaminations, APRIL-2023

Year & Branch: III-ECE-A

Date: 12/4/2023

Subject: IM

ANSWERKEY

Descriptivepaperkeylink:

<https://drive.google.com/file/d/1sa3E1ntjAz3ETSdMlkcHER2jBHmQAQbf/view?usp=sharing>

Key Paper

I. Choose the correct alternative:

1. A
2. C
3. C
4. D
5. A
6. A
7. A
8. B
9. A
10. B

Fill in the blanks:

1. Staffing
2. Physiological
3. 6
4. Organizational structure
5. chain of command and span of control
6. tasks they perform
7. geographic
8. Process
9. Controlling.
10. Feedback.

Sri Indu Institute of Engineering & Technology
Sheriguda (V), Ibrahimpatnam (M), R.R.Dist-501 510
B-Tech II - Mid Examinations, JUNE-2023

Year & Branch: III -ECE-A
Subject: IM

Date: 28/6/2023

ANSWER KEY

Descriptive paper key link:

<https://drive.google.com/file/d/1qRWCmZWdiZTWjvzsJz0iBpRvFmIFbn0U/view?usp=sharing>

Objective/Quiz Key Paper

Key Paper BEFA:

1. A
2. D
3. B
4. C
5. D
6. C
7. D
8. D
9. C
10. A

Fill in the blanks:-

1. Skilled workers.
2. Controlling.
3. Outsourced.
4. Employee productivity
5. Questionnaires
6. Ratio trend analysis
7. Productivity
8. Activity oriented technique
9. Event oriented technique
10. project evaluation and review technique



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ASSIGNMENT-1

SUBJECT: INDUSTRIAL MANAGEMENT

- 1] Describe Industrial management and explain its concept? C325.1 (Knowledge)
- 2] Explain Fayol's of management? C325.1 (evaluating)
- 3] Illustrate matrix organization structure? C325.2 (comprehension)
- 4] Explain types of production system? C325.2 (understand)
- 5] Differentiate virtual organization and cellular organization? C325.3 (Analysis)



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ASSIGNMENT- 2

SUBJECT: INDUSTRIAL MANAGEMENT

1. Compare urban and rural sites? C325.3 (Evaluation)
2. What is method study? Write steps in method study? C325.4 (Analysis)
3. Explain charts for attributes? C325.4 (Knowledge)
4. What are the methods of Job evolution? C325.5 (Comprehension)
5. Explain Critical path? C325.5 (Understand)



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Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510

Website: <https://siiet.ac.in/>

Course Title	Industrial management
Course Code	MT600OE
Programme	B.Tech
Year & Semester	III year II-semester, A sec
Regulation	R18
Course Faculty	T.K.VENKATA NAGAMANI Assistant Professor, ECE

Slow learners:

S No	Roll no	No of backlogs	Internal-I Status	Internal-II Status
1	20X31A0401	4	20	20
2	20X31A0403	5	15	14
3	20X31A0406	4	17	21
4	20X31A0407	3	20	19
5	20X31A0408	3	16	19
6	20X31A0410	5	19	18
7	20X31A0411	4	18	21
8	20X31A0412	5	14	15
9	20X31A0413	4	14	21
10	20X31A0418	8	14	14
11	20X31A0419	4	17	20
12	20X31A0423	3	23	21
13	20X31A0427	3	21	18
14	20X31A0428	4	23	22
15	20X31A0430	4	24	23
16	20X31A0431	5	24	17
17	20X31A0433	3	20	17

18	20X31A0435	3	16	18
19	20X31A0436	5	19	19
20	20X31A0440	4	20	22
22	20X31A0445	4	23	21
23	20X31A0447	3	22	22
24	20X31A0450	4	22	22
25	20X31A0453	4	18	21
26	20X31A0454	5	14	20
27	20X31A0455	4	18	21
28	20X31A0456	5	14	21
30	20X31A0458	3	21	20
31	20X31A0462	3	21	22

Advanced learners:

S.NO	ROLL.NO.	REFERENCE MATERIAL
1	20X31A0404	1. Industrial Engineering Management/NVS Raju/Cengage Learning. 2. Industrial Engineering Hand Book/Maynard. 3. Industrial Engineering Management I Ravi Shankar/ Galgotia.
2	20X31A0409	
3	20X31A0415	
4	20X31A0416	
5	20X31A0420	
6	20X31A0421	
7	20X31A0422	
8	20X31A0425	
9	20X31A0432	
10	20X31A0434	
11	20X31A0437	
12	20X31A0438	
13	20X31A0439	
14	20X31A0442	

15	20X31A0444	
16	20X31A0449	
17	20X31A0452	
18	20X31A0459	
19	20X31A0460	



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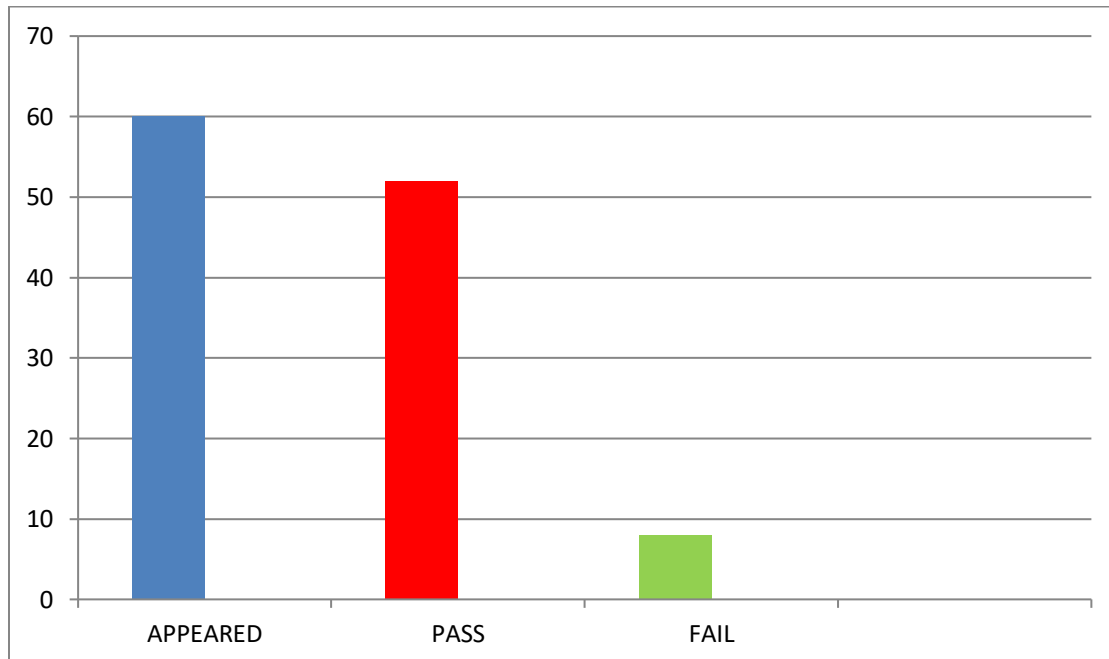
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Website: <https://siiet.ac.in/>

B.TECH III- II SEM ECE-A RESULT ANALYSIS

ACADAMIC YEAR	COURSE NAME	NUMBER OF STUDENTS		QUESTION PAPER SETTING		PASS%
		APPEARED	PASSED	INTERNAL	EXTERNAL	
2022-23	Industrial management	60	52	COURSE FACULTY	JNTUH	87

INDUSTRIAL ANALYSIS (C325) RESULT ANALYSIS





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

REMEDIAL CLASSES TIME TABLE

A.Y 2022-23

SEMESTER-II

BRANCH/ SEC	MON 4.00 PM- 5.00 PM	TUE 4.00 PM- 5.00 PM	WED 4.00 PM- 5.00 PM	THUR 4.00 PM- 5.00 PM	FRI 4.00 PM- 5.00 PM
II ECE-A	EMF&W	LTNM	A&DC	LICA	ECA
II ECE-B	LICA	A&DC	EMF&W	ECA	LTNM
III ECE-A	DSP	VLSID	A&P	ESD	IM
III ECE-B	A&P	ESD	DSP	IM	VLSID
III ECE-C	IM	A&P	ESD	VLSID	DSP
IV ECE-A	WSN	ML	LPVLSID	-	-
IV ECE-B	ML	LPVLSID	WSN	-	-
IV ECE-C	LPVLSID	WSN	ML	-	-


Head of the Department
Electronics and Communication Engg. Dept
SRI INDU INSTITUTE OF ENGG & TECH
Sheriguda(V), Ibrahimpatnam(M), R.R.Dist-501 510


PRINCIPAL
Sri Indu Institute of Engineering & Tech
Sheriguda(VIII), Ibrahimpatnam
R R Dist Telangana -501 510



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Electronics and Communication Engineering

Course Outcome Attainment (Internal Examination-1)

Name of the faculty: T.K.V NAGAMANI Academic Year: 2022-23
Branch & Section: ECE - A Examination: I Internal
Course Name: IM Year: III Semester: II

S.N	HT No.	Q1a	Q1b	Q2a	Q2b	Q3a	Q3b	Q4a	Q4b	Obj1	A1
Max. Marks ==>		5		5		5		5		10	5
1	20X31A0401	4								10	5
2	20X31A0402	5								10	5
3	20X31A0403	5						3		4	5
4	20X31A0404	5						2		10	5
5	20X31A0405	3						3		10	5
6	20X31A0406	5								10	5
7	20X31A0407	3		3						10	5
8	20X31A0408	5		5						10	5
9	20X31A0409	5								10	5
10	20X31A0410	3		3						10	5
11	20X31A0411	5						2		10	5
12	20X31A0412	3		3						10	5
13	20X31A0413			4				5		10	5
14	20X31A0414	5						5		10	5
15	20X31A0415	5						5		9	5
16	20X31A0416	5						2		10	5
17	20X31A0417	5						5		10	5
18	20X31A0418							5		5	5
19	20X31A0419	5						2		10	5
20	20X31A0420	5						3		10	5
21	20X31A0421	5						4		10	5
22	20X31A0422							5		10	5
23	20X31A0423			4				4		10	5
24	20X31A0424	5								10	5
25	20X31A0425	5						5		10	5
26	20X31A0426	5		4						10	5
27	20X31A0427			3				3		10	5
28	20X31A0428	4		3						10	5
29	20X31A0429	5						5		10	5
30	20X31A0430	4						4		10	5
31	20X31A0431	4						4		10	5
32	20X31A0432	4						4		10	5
33	20X31A0433	5								10	5
34	20X31A0434	5						4		10	5
35	20X31A0435	5		4						10	5
36	20X31A0470	5		2						10	5
37	20X31A0471			5		5				10	5
38	20X31A0472							5		10	5
39	20X31A0473	5				2				10	5

CO - 5										
CO - 6										

CO	Sub	obj	Assig	Overall	Level
CO-1	98%	95%	100%	98%	3.00
CO-2	67%	95%	100%	87%	3.00
CO-3		95%	100%	98%	3.00
CO-4					
CO-5					
CO-6					

Attainment Level	
1	40%
2	50%
3	60%

Attainment (Internal 1 Examination) = **3.00**

Faculty Signature



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Electronics and Communication Engineering

Course Outcome Attainment (Internal Examination-2)

Name of the faculty: T.K.V NAGAMANI

Academic Year: 2022-23

Branch & Section: ECE - A

Examination: II Internal

Course Name: BEFA

Year: III Semester: I

S.No	HT No.	Q1a	Q1b	Q2a	Q2b	Q3a	Q3b	Q4a	Q4b	Obj2	A2
Max. Marks ==>		3	2	5		5		5		10	5
1	20X31A0401					4		4		7	5
2	20X31A0402					5		5		9	5
3	20X31A0403									9	5
4	20X31A0404					4				8	5
5	20X31A0405			4				4		8	5
6	20X31A0406	2				4				8	5
7	20X31A0407	2				4				8	5
8	20X31A0408	2						4		8	5
9	20X31A0409					5		5		8	5
10	20X31A0410	2						4		7	5
11	20X31A0411					5		3		8	5
12	20X31A0412					2		2		6	5
13	20X31A0413	3				5				8	5
14	20X31A0414	3				4				8	5
15	20X31A0415					4		5		9	5
16	20X31A0416	3						5		9	5
17	20X31A0417					5		4		8	5
18	20X31A0418									9	5
19	20X31A0419	3						4		7	5
20	20X31A0420	3				5				8	5
21	20X31A0421					1		5		9	5
22	20X31A0422					5		4		9	5
23	20X31A0423					3		4		9	5
24	20X31A0424					3		5		9	5
25	20X31A0425					3		4		9	5
26	20X31A0426									9	5
27	20X31A0427							4		9	5
28	20X31A0428			4				4		9	5
29	20X31A0429			3				4		9	5
30	20X31A0430					5		4		9	5
31	20X31A0431					1		3		8	5
32	20X31A0432					5		5		9	5
33	20X31A0433			5						7	5
34	20X31A0434					5		5		9	5
35	20X31A0435	3				4				6	5
36	20X31A0436	3				5				6	5
37	20X31A0437	3	2					5		9	5
38	20X31A0438					5		5		9	5
39	20X31A0439					5		5		9	5
40	20X31A0440			4				4		9	5
41	20X31A0441					3		4		9	5
42	20X31A0442					5		4		9	5
43	20X31A0444					5		5		9	5
44	20X31A0445	3				4				9	5

Attainment (Internal Examination-2) = **3.00**

Faculty Signature

Percentage of students scored more than target	63%
Attainment level	3

3	60%
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SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Electronics and Communication Engineering

Course Outcome Attainment

Name of the faculty T.K.V NAGAMANI

Academic Year: 2022-23 Examination: I Internal

Branch & Section: ECE - A

Year: III

Course Name: IM

Semester: II

Course Outcomes	1st Internal Exam	2nd Internal Exam	Internal Exam	University Exam	Attainment Level
CO1	3.00		3.00	3.00	3.00
CO2	3.00		3.00	3.00	3.00
CO3	3.00	3.00	3.00	3.00	3.00
CO4		3.00	3.00	3.00	3.00
CO5		3.00	3.00	3.00	3.00
CO6		3.00	3.00	3.00	3.00
Internal & University Attainment:			3.00	3.00	
Weight age			25%	75%	
CO Attainment for the course (Internal, University)			0.75	2.25	
CO Attainment for the course (Direct Method)			3.00		

Overall course attainment level

3.00

Faculty Signature



SRI INDU INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Electronics and Communication Engineering

Program Outcome Attainment (from Course)

Name of Faculty: T.K.V NAGAMANI
 Branch & Section: ECE - A
 Course Name: IM

Academic Year: 2022-23
 Year: III
 Semester: II

CO-PO mapping

	Program Outcomes (PO's)												PSO I	PSO II
	PO1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12		
C325.1	1	2	2	-	-	1	1	1	3	3	1	1	-	-
C325.2	-	1	2	-	-	-	-	-	1	2	-	1	-	-
C325.3	3	3	3	1	1	-	-	-	-	1	-	2	-	-
C325.4	3	3	2	1	1	-	-	-	1	2	-	1	-	-
C325.5	3	3	1	3	1	-	-	-	1	1	-	1	-	-
C325.5	2	3	2	-	2	-	-	-	1	1	3	1	-	-
C325	2.4	2.5	2	1.6	1.2	1	1	1	1.4	1.6	2	1.1	-	-

CO	Course Outcome Attainment
CO1	3.00
CO2	3.00
CO3	3.00
CO4	3.00
CO5	3.00
CO6	3.00
Overall course attainment level	3.00

PO-ATTAINMENT

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO Attainment	2.4	2.5	2.00	1.6	1.2	1	1	1	1.4	1.6	2.0	1.1		

CO contribution to PO - 33%, 67%, 100% (Level 1/2/3)

Faculty Signature



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ASSIGNMENTS AND REGISTERS

Assignment 1 script link:

https://drive.google.com/file/d/1UCOxSOsPecuz1F_FRIVpAmyKpOGGnJoW/view?usp=sharing

Assignment 2 script link:

<https://drive.google.com/file/d/1TJy6Zi8kKAepg6DDdn11Sb9BI1rCajZ8/view?usp=sharing>

Attendance register link:

https://drive.google.com/file/d/1sS2oIFJJb_AQcikuU2Hex1H7RpugqKa0/view?usp=sharing