

## ACADEMIC LESSON PLAN FOR WINTER 2024-25

JES JHARSUGUDA.

**Name of the Faculty: Barsha rani Patel**

### **Entrepreneurship and Management & Smart Technology**

Theory: 4 Periods per week

Internal Assessment: 20 Marks

Total Periods: 60 Periods

End Sem Exam: 80 Marks

Examination: 3 hours

Total Marks: 100 Marks

Semester: 5<sup>th</sup> (IT)

Discipline: IT	Semester:5th	Name of the Teaching Faculty: Barsha Rani Patel , Rabi Kumar Darji
Subject: Entrepreneurship and Management & Smart Technology	No. of Days/per week class allotted: 04 Days	No. of Weeks: 15
Weeks	Class Day	Theory Topics
1 <sup>st</sup>	1 <sup>st</sup>	<b>1. Entrepreneurship</b> Concept /Meaning of Entrepreneurship and Need of Entrepreneurship
	2 <sup>nd</sup>	Characteristics, Qualities and Types of entrepreneurs
	3 <sup>rd</sup>	Functions and Barriers in entrepreneurship
	4 <sup>th</sup>	Entrepreneurs vs. Manager
2 <sup>nd</sup>	1 <sup>st</sup>	Forms of Business Ownership: Sole proprietorship, partnership forms and others
	2 <sup>nd</sup>	Types of Industries
	3 <sup>rd</sup>	Concept of Start-ups
	4 <sup>th</sup>	Entrepreneurial support agencies at National, State, District Level : DIC, NSIC, OSIC
3 <sup>rd</sup>	1 <sup>st</sup>	SIDBI, NABARD, Commercial Banks, KVIC etc.
	2 <sup>nd</sup>	Technology Business Incubators (TBI) and Science and Technology Entrepreneur Parks
	3 <sup>rd</sup>	<b>2. Market Survey and Opportunity Identification (Business Planning)</b> Business Planning

	4 <sup>th</sup>	SSI, Ancillary Units, Tiny Units
4 <sup>th</sup>	1 <sup>st</sup>	Service sector Units, Time schedule Plan
	2 <sup>nd</sup>	Agencies to be contacted for Project Implementation
	3 <sup>rd</sup>	Assessment of Demand and supply
	4 <sup>th</sup>	Potential areas of Growth of Demand and supply
5 <sup>th</sup>	1 <sup>st</sup>	Identifying Business Opportunity
	2 <sup>nd</sup>	Final Product selection
	3 <sup>rd</sup>	<b>3. Project report Preparation</b> Preliminary project report
	4 <sup>th</sup>	Detailed project report
6 <sup>th</sup>	1 <sup>st</sup>	Techno economic Feasibility
	2 <sup>nd</sup>	Project Viability
	3 <sup>rd</sup>	<b>4. Management Principles</b> Definitions of management and importance of management
	4 <sup>th</sup>	Principles of management
7 <sup>th</sup>	1 <sup>st</sup>	Principles of management Functions of management (planning, organizing)
	2 <sup>nd</sup>	Functions of management (staffing, directing, leadership, motivating, Communicating and controlling etc.)
	3 <sup>rd</sup>	Level of Management in an Organization
	4 <sup>th</sup>	<b>5. Functional Areas of Management</b> Production management (Function and Activities), Productivity, Quality control.
8 <sup>th</sup>	1 <sup>st</sup>	Production Planning and control, Inventory Management - Need and techniques of Inventory management.
	2 <sup>nd</sup>	Financial Management, Functions of Financial management, Management of Working capital.
	3 <sup>rd</sup>	Costing (only concept), Break even Analysis, Brief idea about Accounting Terminologies: Book Keeping, Journal entry
	4 <sup>th</sup>	Petty Cash book, P&L Accounts, Balance Sheets.
9 <sup>th</sup>	1 <sup>st</sup>	Concept of Marketing and Marketing Management and its techniques.

	2 <sup>nd</sup>	Concept of 4P s (Price, Place, Product, Promotion), Human Resource Management.
	3 <sup>rd</sup>	Functions of Personnel Management, Manpower Planning, Recruitment, Sources of manpower.
	4 <sup>th</sup>	Sources of manpower, Selection process, Method of Testing.
10 <sup>th</sup>	1 <sup>st</sup>	Methods of Training & Development, Payment of Wages.
	2 <sup>nd</sup>	<b>6. Leadership and Motivation</b> Leadership (Definition and Need/Importance), Qualities and functions of a leader.
	3 <sup>rd</sup>	Manager Vs Leader, Style of Leadership (Autocratic, Democratic, Participative)
	4 <sup>th</sup>	Motivation (Definition and characteristics), Importance of motivation.
11 <sup>th</sup>	1 <sup>st</sup>	Factors affecting motivation, Theories of motivation (Maslow).
	2 <sup>nd</sup>	Methods of Improving Motivation, Importance of Communication in Business.
	3 <sup>rd</sup>	Types and Barriers of Communication.
	4 <sup>th</sup>	<b>7. Work Culture, TQM &amp; Safety</b> Human relationship and Performance in Organization.
12 <sup>th</sup>	1 <sup>st</sup>	Relations with Peers, Superiors and Subordinates. TQM concepts:Quality Policy
	2 <sup>nd</sup>	TQM concepts: Quality Management, Quality system, QMS
	3 <sup>rd</sup>	Accidents and Safety, Cause, preventive measures
	4 <sup>th</sup>	General Safety Rules, Personal Protection Equipment (PPE)
13 <sup>th</sup>	1 <sup>st</sup>	<b>8. Legislation</b> Intellectual Property Rights (IPR), Patents
	2 <sup>nd</sup>	Trademarks
	3 <sup>rd</sup>	Copyrights
	4 <sup>th</sup>	Describes the factories Act 1948
14 <sup>th</sup>	1 <sup>st</sup>	Features of Factories Act 1948 with Amendment (only salient points)
	2 <sup>nd</sup>	Features of Payment of Wages Act 1936 (only salient points)

	3 <sup>rd</sup>	<b>9. Smart Technology</b> Concept of IOT, How IOT works
	4 <sup>th</sup>	Components of IOT
15 <sup>th</sup>	1 <sup>st</sup>	Characteristics of IOT, Categories of IOT
	2 <sup>nd</sup>	Applications of IOT- Smart Cities, Smart Transportation
	3 <sup>rd</sup>	Smart Home, Smart Healthcare, Smart Industry
	4 <sup>th</sup>	Smart Agriculture, Smart Energy Management etc.

# JES, JHARSUGUDA

Name	<u>Mr. Sabyasachi Sarangi</u>	Total Hrs. planned:60 Total Hrs. per week:04
Session:	2024-2025	
Subject: Code/Name	<b>Th.2</b>	<b>Internet and Web Technology</b>
<b>Semester/Programme / Department</b>	5 <sup>th</sup> SEMESTER/Diploma/Information Technology	
<b>Course Objective</b>	<ul style="list-style-type: none"><li>• Internet is the buzz word in today's society.</li><li>• It is a vast pool of information.</li><li>• Without the knowledge of internet, we are in total darkness.</li><li>• This paper deals with TCP/IP which is the backbone of internet.</li><li>• Web pages are used to project the profile on an organization, product or person etc.</li><li>• This paper also deals with the design aspect of Web Page.</li></ul>	

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Sl. No	Detail Description of Topics/Subtopics	Mode of Lecture
<b>1.</b>	<b>Internet fundamental</b>	
1.1	Motivation for internet working.	Chalk & talk
1.2	Internet architecture board.	Chalk & talk
1.3	Internet protocol and standardization.	Chalk & talk
1.4	Role of ISP and factors of choosing an ISP.	Chalk & talk
1.5	Internet service providers in India.	Chalk & talk
1.6	Types of connectivity such as dial up, leased,	Chalk & talk
	VSAT etc.	Chalk & talk
1.7	Properties of internet.	Chalk & talk
1.8	Internet architecture.	Chalk & talk
1.9	Interconnection through IP router.	Chalk & talk
1.10	All networks are equal.	Chalk & talk
1.11	Internet address.	Chalk & talk
1.12	Original classful addressing scheme	Chalk & talk
1.13	Address specifies network connections	Chalk & talk
1.14	Dotted decimal notation	Chalk & talk
1.15	Internet addressing authority	Chalk & talk
<b>2</b>	<b>TCP / IP</b>	
2.1	TCP / IP internet layering model	Chalk & talk
2.2	Reliable stream transport service Need for stream delivery	Chalk & talk
2.3	Properties of reliable delivery service	Chalk & talk
2.4	Providing reliability	Chalk & talk
2.5	Idea behind slide window	Chalk & talk
2.6	Port connection and end points, segments, streams sequence numbers	Chalk & talk

2.7	TCP segment format	Chalk & talk
2.8	TCP header	Chalk & talk
2.9	TCP checksum	Chalk & talk
2.10	Acknowledgement	Chalk & talk
2.11	Timeout and retransmission	Chalk & talk
2.12	Respond to conjunction	Chalk & talk
2.13	Establishment of a TCP connection	Chalk & talk
2.14	Source and destination address	Chalk & talk
2.15	Protocol number	Chalk & talk
2.16	Checksum	Chalk & talk
2.17	Closing TCP connection	Chalk & talk
2.18	TCP connection reset	Chalk & talk
	Revision of Chapter 2	
<b>3</b>	<b>INTERNET PROTOCOL</b>	
3.1	Connectionless data gram delivery	Chalk & talk
3.2	Concept of unreliable delivery	Chalk & talk
3.3	Connectionless delivery system	Chalk & talk
3.4	Propose of internet protocol	Chalk & talk
3.5	IP header	Chalk & talk
3.6	Source and destination address	Chalk & talk
3.7	Protocol number	Chalk & talk
3.8	Checksum	Chalk & talk
3.9	Rooting in an internet	Chalk & talk
3.10	Direct and indirect delivery	Chalk & talk
3.11	Table driven IP root	Chalk & talk
3.12	Default root	Chalk & talk
3.13	Host specific roots	Chalk & talk
3.14	Rooting with IP address	Chalk & talk
	Revision of Chapter 3	
<b>4</b>	<b>SUBNET ADDRESS EXTENSION</b>	
4.1	Introduction to subnet address extension	Chalk & talk
4.2	Minimizing network number	Chalk & talk
4.3	Transparent routers	Chalk & talk
4.4	Subnet addressing	Chalk & talk
4.5	Flexibility in subnet address assignment	Chalk & talk
4.6	Implementation of subnet with mask	Chalk & talk
4.7	Subnet mask representation	Chalk & talk
4.8	Routing in the presence of subnet	Chalk & talk
	Revision of Chapter 4	
<b>5</b>	<b>UDP</b>	
5.1	Introduction to UDP	Chalk & talk
5.2	Identifying the ultimate destination	Chalk & talk
5.3	Format of UDP message	Chalk & talk
	Revision of Chapter 5	

<b>6</b>	<b>DOMAIN NAMES SYSTEM</b>	
6.1	Hierarchical names	Chalk & talk
6.2.1	Subnet authority	Chalk & talk
6.2.1	Internet domain names	Chalk & talk
6.2.	Mapping of domain name to address	Chalk & talk
6.2.4	Domain name resolution	Chalk & talk
6.2.5	Efficient translation	Chalk & talk
6.2.6	Abbreviation of domain name	Chalk & talk
	Revision of Chapter 6	
<b>7</b>	<b>INTERNET APPLICATIONS &amp; SERVICES</b>	
7.1	E-Mail network	Chalk & talk
7.2	E-Mail protocols	Chalk & talk
7.3	Format of an e-mail message	Chalk & talk
7.4	E-Mail routing	Chalk & talk
7.5	E-Mail clients, POP3, IMAP	Chalk & talk
7.6	Public domain software	Chalk & talk
7.7	Types of FTP servers	Chalk & talk
7.8	FTP clients	Chalk & talk
7.9	Telnet protocol	Chalk & talk
7.10	Server domain	Chalk & talk
7.11	Clients	Chalk & talk
7.12	IRC network & servers	Chalk & talk
7.13	Channels	Chalk & talk
7.14	World wide web	Chalk & talk
7.15	Browser	Chalk & talk
	Revision of Chapter 7	
<b>8</b>	<b>HTML &amp; INTERACTIVE TOOLS</b>	
8.1	Document overview explain header elements	Chalk & talk
8.2	Section heading	Chalk & talk
8.3	Block oriented elements discuss list	Chalk & talk
8.4	Inline elements	Chalk & talk
8.5	Visual markup	Chalk & talk
8.6	Hypertext links	Chalk & talk
8.7	Uniform resource locator discuss imagers	Chalk & talk
8.8	Tables	Chalk & talk
8.9	Special characters	Chalk & talk
8.10	CGI (common gateway interface) explain active X	Chalk & talk
8.11	VB script	Chalk & talk
8.12	Java script	Chalk & talk
8.13	XML application	Chalk & talk
8.14	XML rules	Chalk & talk
8.15	Displaying XML documents	Chalk & talk
8.16	Parts of XML documents	Chalk & talk
8.17	Concepts of DTD	Chalk & talk
8.18	Entity definition & classification concepts of templates &	



	Its use filtering & sorting.	Chalk & talk
	Revision of Chapter 8	
	<b>BOOKS :-</b>	
1	Internet working with TCP / IP Vol-1 ; Principles, Protocols & Architecture By Douglas E. Comer - PHI	
2	HTML : The definitive guide – By Chuck Musciano & Kennedy	
3	Internet working with TCP/IP Vol II : Design, implementation & internals By Douglas E. Comer & David L. Stevens - PHI	
4	Internet and web page design By Sisodia : BPB publication	
5	Web technologies By U.K Roy, Oxford Univ. Press	

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## Lesson Plan (2024-2025 )

<b>Name</b>	<b>MRS. BARSHARANI PATEL</b>	Total Hrs planned: 60 Total Hrs per week: 04
Academic year 2024-2025		
Subject: Code/Name	<b>Th.3</b>	<b>SOFTWARE ENGINEERING</b>
<b>Semester/ Programme/ Department</b>	<b>5<sup>th</sup> SEMESTER/ Diploma/ Information Technology</b>	
<b>Course Objective</b>	<ul style="list-style-type: none"><li>• Knowledge of basis SW engineering methods and practices and their appropriate application</li><li>• Basic knowledge and understanding of the analyses and design of complex system.</li><li>• Ability to apply software engineering principals and technique.</li><li>• Ability to develop maintain and evaluate large scale software system.</li><li>• Ability to perform independent , research and analysis.</li><li>• To communicate and coordinate competently by listening , speaking , reading and writing English for technical and general purposes.</li><li>• Ability to work as an effective member or leader of software engineering team.</li><li>• To manage time proses and resources effectively by competing demand to achieve personal and teams goals identify and analyses the common threats in each domain.</li></ul>	

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Sl.No.	Period /Class	Time (Min)	Unit	Detail Description of Topics/Subtopics	Mode of Lecture	References (Text Book and reference book Page No __ to __)
1	1	55	1	<b>Introduction to Software Engineering.</b>	Chalk & talk	TB1: 1 to 53
				Program vs Software product		
2	2	55	1	Emergencies of Software Engineering.	Chalk & talk	TB1: 15
				Computer System Engineering.		
3	3	55	1	Software Life Cycle Models.	Chalk & talk	TB1: 30 to 48
				Classical Water fall model		
4	4	55	1	Iterative Water fall model	Chalk & talk	TB1: 41 to 42
				Prototyping model		
5	5	55	1	Evolutionary model	PPT / NPTEL	TB1: 45 to 47
				Spiral model		
6	6	55	1	<b>Revision Chapter - 1</b>	<b>Questioners</b>	
7	7	55	2	<b>Software Project Management</b>	Chalk & talk	TB1: 57 to 107
				Responsibilities of Project Manager		
8	8	55	2	Project Planning	Chalk & talk	TB1 : 58
9	9	55	2	Metrics for project size estimation (LOC & FP)	PPT / NPTEL	TB1 : 61 to 63
10	10	55	2	Project Estimation Techniques	Chalk & talk	TB1 : 66 to 68
11	11	55	2	COCOMO Models, Basic, Intermediate and complete	PPT / NPTEL	TB1: 68 to 74
12	12	55	2	Scheduling	Chalk & talk	TB1: 83
				Organization and Team Structure		
13	13	55	2	Staffing	Chalk & talk	TB1: 93 to 94
14	14	55	2	Risk Management	Chalk & talk	TB1: 95 to 97
15	15	55	2	Configuration Management.	PPT / NPTEL	TB1: 98 to 103
16	16	55	2	<b>Revision Chapter - 2</b>	<b>Questioners</b>	
17	17	55	3	<b>Requirement Analysis and Specification</b>	Chalk & talk	TB1: 108 to 148
				Requirements gathering and analysis		
18	18	55	3	Software Requirements Specification. (SRS)	Chalk & talk	TB1: 114

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19	19	55	3	Contents of SRS	Chalk & talk	TB1: 115
20	20	55	3	Characteristics of Good SRS	Chalk & talk	TB1: 115
				Organization of SRS		
21	21	55	3	Techniques for representing complexion logic.	Chalk & talk	TB1: 129
22	22	55	3	<b>Revision Chapter - 3</b>	<b>Questioners</b>	
23	23	55	4	<b>Software Design</b>	Chalk & talk	TB1: 149 to 202

24	24	55	4	What is a good S/W design.	Chalk & talk	TB1: 152
				Cohesion and coupling.		
25	25	55	4	Neat arrangement	Chalk & talk	TB1: 160
26	26	55	4	S/W Design approaches	Chalk & talk	TB1: 162 to 163
27	27	55	4	Structured analysis	Chalk & talk	TB5: 172
28	28	55	4	Data Flow Diagrams	PPT / NPTEL	TB1: 172 to 193
				Symbols used in DFD		
29	29	55	4	Designing DFD	Chalk & talk	TB1: 174
				Developing DFD model of a system		
30	30	55	4	Short coming of DFD	Chalk & talk	TB1:193
				Structured Design		
31	31	55	4	Principles of transformation of DFD to Structure Chart	Chalk & talk	TB1: 196
				Transform analysis and Transaction Analysis		
32	32	55	4	Design Review	Chalk & talk	TB1: 201

### Revision Chapter - 4

33	33	55	5	<b>User Interface Design</b>	Chalk & talk	TB1: 300 to 322
34	34	55	5	Characteristics of good interface	Chalk & talk	TB1: 301
35	35	55	5	What is UID	Chalk & talk	TB1: 302
36	36	55	5	Basic concepts of UID	PPT / NPTEL	TB1: 303 to 304
37	37	55	5	What is user interfaces	PPT / NPTEL	TB1: 305
38	38	55	5	Types of user interfaces	Chalk & talk	TB1: 306 to 307
39	39	55	5	Components based GUI development.	PPT / NPTEL	TB1: 308 to 315
40	40	55	5	<b>Revision Chapter - 5</b>	<b>Questioners</b>	

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41	41	55	6	<b>Software Coding And Testing</b>	Chalk & talk	TB1: 323 to 369
				Coding		
42	42	55	6	Code Review	Chalk & talk	TB1: 326
				Code walk through		
				Code inspections and software Documentation		
43	43	55	6	Testing	Chalk & talk	TB1: 331 to 334
				Unit Testing		
44	44	55	6	Black Box Testing	Chalk & talk	TB1: 336 to 338
				Equivalence class partitioning and boundary value analysis		
45	45	55	6	White Box Testing	Chalk & talk	TB1: 338
46	46	55	6	Different White Box methodologies statement coverage branch coverage, condition coverage, path coverage, cyclamates complexity data flow	Chalk & talk	TB1: 338 to 347

				based testing and mutation testing.		
47	47	55	6	Debugging approaches	Chalk & talk	TB1: 348
48	48	55	6	Debugging guidelines	Chalk & talk	TB1: 349
49	49	55	6	Integration Testing	Chalk & talk	TB1: 351
50	50	55	6	Phased and incremental integration testing	PPT / NPTEL	TB1: 352 - TB1: 356
				System testing alphas beta and acceptance testing		
51	51	55	6	Performance Testing, Error seeding	PPT / NPTEL	TB1: 357
52	52	55	6	General issues associated with testing.	Chalk & talk	TB1: 360
				<b>Revision Chapter - 6</b>		
53	53	55	7	<b>Software Reliability</b>	Chalk & talk	TB1: 370 to 395
54	54	55	7	Software Reliability	Chalk & talk	TB1: 371
55	55	55	7	Different reliability metrics	Chalk & talk	TB1: 373
56	56	55	7	Reliability growth modeling	Chalk & talk	TB1: 375
57	57	55	7	Software testing	Chalk & talk	TB1: 376

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57	57	55	7	Software quality	Chalk & talk	TB1: 377
58	58	55	7	Software Quality Management System	PPT / NPTEL	TB1: 377 to 379
59	59	55	7	Problems	Chalk & talk	TB1: 379 to 381
60	60	55	7	<b>Revision Chapter - 7</b>	Questions	

## CGM LESSION PLAN

**JHARSUGUDA ENGINEERING SCHOOL, JHARSUGUDA**

<b>Name of the Faculty: Subrata Parida</b>	<b>Academic Year: 2024-25</b>
<b>Course No.: Th 4</b>	<b>Course name: INFORMATION TECHNOLOGY</b>
<b>Programe: Diploma</b>	<b>Branch: I.T.</b>
<b>Year/Sem:5th</b>	<b>Section: NA</b>

<b>Sl. No.</b>	<b>Period</b>	<b>Time (min)</b>	<b>Chept</b>	<b>Topic to be Covered</b>	<b>Teaching Method</b>
1	1	55 min	1	<b>Chapter1:</b> Introduction to applications of Computer Graphics & Multimedia. Computer graphics in CAD	Black board
2	2	55min	1	Presentation Graphics Computer Art & Entertainment Education & Training, Visualization Image Processing & Graphic User Interface	Black board
3	3	55min	2.1	Graphics System	Black board
4	4	55min	2.2	Raster Scan Display & Random scan display	Black board
5	5	55min	2.3	Graphic input device	PPT
6	6	55min	2.4	Graphics Software	PPT
7	7	55min	2.5	Revision of Chapter 2 and Quiz	PPT
8	8	55min	3.1	Introduction to Graphics Output primitive, Points & Lines	Black board
9	9	55min	3.2	DDA Line Drawing Algorithm Bresenham's Line drawing Algorithm Midpoint Circle alogorithm	Black board
10	10	55min	3.3	Filled Area Primitives, State Character Data Type	Black board

11	11	55min	3.4	Boundary fill algorithm, Flood fill algorithm	Black board
12	12	55 min	3.5	Revision of Chapter 3 and quiz	Black board
13	13	55 min	4.1	Translation ,Rotation ,Scaling ,Reflection ,shear	Black board
14	14	55min	4.2	Matrix representation and Homogenous coordinate system ,Composite Transformation	Black board
15	15	55 min	4.3	Revision of Chapter 4 And Quiz	PPT
16	16	55 min	5.1	Viewing pipeline	Black board
17	17	55min	5.2	Viewing coordinate reference frame, Window to view port coordinate transformation	Black board
18	18	55min	5.3	Line clipping concept , Polygon clipping concept	Black board
19	19	55 min	5.4	Revision of Chapter 5 & Quiz	PPT
20	20	55 min	6.1	Polygon surface	Black board
21	21	55 min	6.2	Polygon Table	Black board
22	22	55 min	6.3	Polygon mesh	Black board
23	23	55min	6.4	Quadric surfaces	Black board
24	24	55min	6.5	Sphere, Ellipsoid	Black board
25	25	55 min	6.6	Spline representation	Black board
26	26	55 min	6.7	Plane equation	Black board
27	27	55 min	6.8	Bezier curves & Surfaces	Black board
28	28	55 min	6.9	B-Spline curves & surfaces.	PPT
29	29	55 min	6.10	Revision of Chapter 6 & Quiz	Black board
30	30	55 min	7.1	Translation, Rotation, Scaling, Reflection, Shear	Projector
31	31	55 min	7.2	Composite transformation	Projector
32	32	55 min	7.3	Modeling & Coordinate transformation	PPT
32	32	55 min	7.4	Revision of Chapter 7 & Quiz	Black board



33	33	55 min	8.1	Viewing pipeline	Projector
34	34	55 min	8.2	Viewing coordinates	Projector
35	35	55 min	8.3	Parallel projection	Black board
36	36	55 min	8.4	Perspective projection	Black board
37	37	55 min	8.5	Concept of 3D clipping	Black board
38	38	55 min	8.6	Revision of Chapter 8 & Quiz	Black board
39	39	55 min	9.1	Different light sources used in 3D Modeling	Black board
40	40	55 min	9.2	Basic Illumination model	Black board
41	41	55 min	9.3	Ambient light & Diffuse reflection & Specular reflection	Black board
42	42		9.4	Revision of Chapter 9 & Quiz	
43	43	55 min	10.1	Basics of Acoustics, Psychoacoustics	Black board
44	44	55 min	10.2	Musical sound and noise, elementary sound system	Black board
45	45	55 min	10.3	Microphones	Black board
46	46	55 min	10.4	Amplifiers, digital audio formats	Black board
47	47	55 min	10.5	Audio compression (LPC, Sub Band Encoding)	Black board
48	48	55 min	10.6	Revision of Chapter 10 & Quiz	Black board
49	49	55 min	11.1	Vector and raster Graphics	Black board
50	50	55 min	11.2	Digital representation of image, colour, 16-bit, 24-bit colour depth	Black board
51	51	55 min	11.3	Colour Characteristics-Hue, saturation, Luminance & Colour Palette	PPT
52	52	55 min	11.4	Image formats-JPEG, BMP, TIFF, GIF & Image evaluation	PPT
55	55	55 min	11.5	Layers & Filters, Image manipulation-scaling, cropping, rotation	Black board
56	56	55 min	11.6	Revision of Chapter 11 & Quiz	Black board
57	57	55 min	12.1	Video in Multimedia	Black board
58	58	55 min	12.2	Basics of Motion-Video & Sources of Motion-Video	PPT
59	59	55 min	12.3	Video formats, lines, frames, fields, TV Broadcast standards-PAL, NTSC, SECAM	Black board
60	60	55 min	12.4	Revision of Chapter 12 & Quiz	Black board

## MC LESSION PLAN

JHARSUGUDA ENGINEERING SCHOOL, JHARSUGUDA

<b>Name of the Faculty: SABYASACHI SARANGI</b>	<b>Academic Year: 2024-25</b>
<b>Course No.: Th 5</b>	<b>Course name: INFORMATION TECHNOLOGY</b>
<b>Programe: Diploma</b>	<b>Branch: I.T.</b>
<b>Year/Sem:5th</b>	<b>Section: NA</b>

<b>Sl. No.</b>	<b>Period</b>	<b>Time (min)</b>	<b>Chept</b>	<b>Topic to be Covered</b>	<b>TeachingMethod</b>
1	1	55 min	1.1	Networks	Black board
2	2	55min	1.2	Wireless Networks	Black board
3	3	55min	1.3	Mobile Computing	Black board
4	4	55min	1.4	Mobile Computing Characteristics	Black board
5	5	55min	1.5	Application of Mobile Computing	PPT
6	6	55min	1.6	<b>Revision of Chapter 1 &amp; Quiz</b>	PPT
7	7	55min	2.1	C/S architecture	PPT
8	8	55min	2.2	n-tier architecture	Black board
9	9	55min	2.3	n-tier architecture and www	Black board
10	10	55min	2.4	Peer-to Peer architecture	Black board

11	11	55min	2.5	Mobile Agent Architecture	Black board
12	12	55 min	2.6	Revision of Chapter 2 & Quiz	Black board
13	13	55 min	3.1	Signals	Black board
14	14	55min	3.2	Period, Frequency and Bandwidth.	Black board
15	15	55 min	3.3	Antennas, Signal Propagation, Multiplexing Signal Propagation	PPT
16	16	55 min	3.4	Modulation, Spread Spectrum	Black board
17	17	55min	3.5	Cellular System	Black board
18	18	55min	3.6	<b>Revision of Chapter 3 &amp; Quiz</b>	Black board
19	19	55 min	4.1	Introduction	PPT
20	20	55 min	4.2	Hidden/ Exposed Terminals	Black board
21	21	55 min	4.3	The basic Access Method	Black board
22	22	55 min	4.4	Near / Far Terminals	Black board
23	23	55min	4.5	SDMA, FDMA, TDMA, CDMA	Black board
24	24	55min	4.6	<b>Revision of Chapter 4 &amp; Quiz</b>	Black board
25	25	55 min	5.1	Wireless LAN and communication, Infrared, Radio Frequency	Black board
26	26	55 min	5.2	IR Advantages and Disadvantages, RF Advantages and Disadvantages, Wireless Network Architecture Logical,	Black board
27	27	55 min	5.3	MAC layer, Security, Synchronisation	Black board
28	28	55 min	5.4	Power management	PPT
29	29	55 min	5.5	Roaming, Bluetooth Overview	Black board
30	30	55 min	5.6	<b>Revision of Chapter 5 &amp; QUIZ</b>	Projector
31	31	55 min	6.1	Introduction	Projector
32	32	55 min	6.2	Scenario of Mobile Communication	PPT
32	32	55 min	6.3	Mobile Communication Generations 1G to 3G	Black board

33	33	55 min	6.4	3 <sup>rd</sup> Generation Mobile Communication Network	Projector
34	34	55 min	6.5	Universal Mobile telecommunication System (UMTS)	Projector
35	35	55 min	6.6	<b>Revision of Chapter 6 &amp; Quiz</b>	Black board
36	36	55 min	7.1	Overview	Black board
37	37	55 min	7.2	Working with mobile IP	Black board
38	38	55 min	7.3	Mobile IP Entities, Mobile IPv6 Address Types, Mobile IPv6 Address Scope, Mobile IPv6 Features	Black board
39	39	55 min	7.4	Mobility Agents, Components of Mobile IP, Mobile IP Entities	Black board
40	40	55 min	7.5	Components of Mobile IP	Black board
41	41	55 min	7.6	<b>Revision of Chapter 7 &amp; Quiz</b>	Black board
42	42	55 min	8.1	WWW architecture for Mobile computing, Need of WAP, Benefits of WAP, Examples of WAP	
43	43	55 min	8.2	WAP- Architecture, WAP protocols	Black board
44	44	55 min	8.3	WML, WAP Push architecture	Black board
45	45	55 min	8.4	Push-Pull based data acquisition	Black board
46	46	55 min	8.5	I-mode, WAP 2.x	Black board
47	47	55 min	8.6	<b>Revision of Chapter 8 &amp; Quiz</b>	Black board
48	48	55 min	9.1	GSM	Black board
49	49	55 min	9.2	GPRS	Black board
50	50	55 min	9.3	IS-95	Black board
51	51	55 min	9.4	CDMA-2000	PPT
52	52	55 min	9.5	W-CDMA, Wireless Sensor Networks	PPT
53	53	55 min	9.6	<b>Revision of Chapter 9 &amp; Quiz</b>	Black board
54	54	55 min	10.1	Short Message Services (SMS)	Black board
55	55	55 min	10.2	Multimedia Message Services (MMS)	Black board
56	56	55 min	10.3	Multimedia transmission over wireless	PPT
57	57	55 min	10.4	<b>Revision of Chapter 10 &amp; Quiz</b>	Black board
58	58	55 min	10.5	<b>Test</b>	
59	59	55min	10.6	<b>Assignment</b>	
60	60	55min	10.7	<b>All Chept. Revision</b>	