

Lesson plan of 2022-2023

(5TH SEMESTER IT)

DISCIPLINE: IT	SEMESTER:5TH	NAME OF THE TEACHING FACULTY: K Tanaya Acharya
SUBJECT: EM	NO.OF DAYS/PER WEEK CLASS ALLOTTED : 4	SEMESTER FROM DATE: 15/09/2022 TO DATE: 21/01/2023 NO.OF WEEKS:15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 ST	1 ST	Entrepreneurship Concept /Meaning of Entrepreneurship
	2 ND	Need of Entrepreneurship
	3 RD	Characteristics, Qualities and Types of entrepreneur, Functions
	4 TH	Barriers in entrepreneurship
2 ND	1 ST	Entrepreneurs vrs. Manager
	2 ND	Forms of Business Ownership: Sole proprietorship, partnership forms and others
	3 RD	Types of Industries, Concept of Start-ups
	4 TH	Entrepreneurial support agencies at National, State, District Level(Sources): DIC, NSIC,OSIC, SIDBI, NABARD, Commercial Banks, KVIC etc.
3 RD	1 ST	Entrepreneurial support agencies at National, State, District Level(Sources): DIC, NSIC,OSIC, SIDBI, NABARD, Commercial Banks, KVIC etc.
	2 ND	Technology Business Incubators (TBI) and Science and Technology Entrepreneur Parks
	3 RD	Market Survey and Opportunity Identification (Business Planning) Business Planning
	4 TH	SSI, Ancillary Units
4 TH	1 ST	Tiny Units, Service sector Units
	2 ND	Time schedule Plan
	3 RD	Agencies to be contacted for Project Implementation
	4 TH	Assessment of Demand and supply and Potential areas of Growth
5 TH	1 ST	Identifying Business Opportunity
	2 ND	Final Product selection
	3 RD	Project report Preparation Preliminary project report
	4 TH	Detailed project report
6 TH	1 ST	Techno economic Feasibility
	2 ND	Project Viability

	3 RD	Management Principles Definitions of management
	4 TH	Principles of management
7 TH	1 ST	Functions of management (planning, 2rganizing, staffing, directing and controlling etc.)
	2 ND	Functions of management (planning, 2rganizing, staffing, directing and controlling etc.)
	3 RD	Level of Management in an Organisation
	4 TH	Functional Areas of Management W. Production management Functions, Activities
8 TH	1 ST	Productivity Quality control Production Planning and control
	2 ND	b) Inventory Management Need for Inventory management
	3 RD	Models/Techniques of Inventory management
	4 TH	c) Financial Management Functions of Financial management Management of Working capital Costing (only concept)
9 TH	1 ST	Break even Analysis Brief idea about Accounting Terminologies: Book Keeping, Journal entry, Petty Cash book, P&L Accounts, Balance Sheets(only Concepts)
	2 ND	d) Marketing Management Concept of Marketing and Marketing Management
	3 RD	Marketing Techniques (only concepts) Concept of 4P s (Price, Place, Product, Promotion)
	4 TH	e) Human Resource Management Functions of Personnel Management Manpower Planning, Recruitment,
10 TH	1 ST	Sources of manpower, Selection process, Method of Testing, Methods of Training & Development, Payment of Wages
	2 ND	Leadership and Motivation W. Leadership Definition and Need/Importance
	3 RD	Qualities and functions of a leader Manager Vs Leader
	4 TH	Style of Leadership (Autocratic, Democratic, Participative)
11 TH	1 ST	b) Motivation Definition and characteristics Importance of motivation
	2 ND	Factors affecting motivation Theories of motivation (Maslow) Methods of Improving Motivation

	3 RD	Importance of Communication in Business Types and Barriers of Communication
	4 TH	Work Culture, TQM & Safety Human relationship and Performance in Organization
12 TH	1 ST	Relations with Peers, Superiors and Subordinates
	2 ND	TQM concepts: Quality Policy, Quality Management, Quality system
	3 RD	Accidents and Safety, Cause, preventive measures
	4 TH	General Safety Rules , Personal Protection Equipment(PPE)
13 TH	1 ST	Legislation a) Intellectual Property Rights(IPR),
	2 ND	Patents, Trademarks, Copyrights
	3 RD	b) Features of Factories Act 1948 with Amendment (only salient points)
	4 TH	b) Features of Factories Act 1948 with Amendment (only salient points)
14 TH	1 ST	c) Features of Payment of Wages Act 1936 (only salient points)
	2 ND	c) Features of Payment of Wages Act 1936 (only salient points)
	3 RD	Smart Technology Concept of IOT, How IOT works
	4 TH	Components of IOT, Characteristics of IOT
15 TH	1 ST	Categories of IOT
	2 ND	Applications of IOT- Smart Cities, Smart Transportation,
	3 RD	Smart Home, Smart Healthcare, Smart Industry,
	4 TH	Smart Agriculture, Smart Energy Management etc.
DISCIPLINE: IT	SEMESTER:5TH	NAME OF THE TEACHING FACULTY: REETANJALI PANDA
SUBJECT: IWT	NO.OF DAYS/PER WEEK CLASS ALLOTTED: 4	SEMESTER FROM DATE: 15/09/2022 TO DATE: 21/01/2023 NO.OF WEEKS:15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 ST	1 ST	Internet Basics Computer network
	2 ND	Concept of Internet, Intranet
	3 RD	Modem
	4 TH	IP Address, Internet Domains
2 ND	1 ST	CIDR Notation, ISP

	2 ND	TCP/IP
	3 RD	Internet Connectivity & WWW Introduction to connectivity
	4 TH	Medium and methods of connectivity, ISDN, VSAT, RF Link
3 RD	1 ST	Working of Internet
	2 ND	Introduction to WWW
	3 RD	Application Level Protocol
	4 TH	Web Browser, URL, Hyper text
4 TH	1 ST	Hyperlinks, Hypermedia
	2 ND	Search Engine, Proxy sever
	3 RD	CGI, URI, Dreamweaver
	4 TH	Internet Security Introduction to security
5 TH	1 ST	Types of security
	2 ND	Authentication & Authorization
	3 RD	Firewalls
	4 TH	Encryption & Decryption
6 TH	1 ST	SSL
	2 ND	Internet Application E-Mail, Email protocols
	3 RD	Telnet, FTP
	4 TH	Newsgroup
7 TH	1 ST	Chartroom Internet Relay Chat
	2 ND	Video Conferencing
	3 RD	E-Commerce
	4 TH	Website Classifications Static Websites
8 TH	1 ST	Dynamic websites Web portals
	2 ND	Social Networking Sites RSS Feed, Blog, Netiquette
	3 RD	Development of Portals Using HTML Design a webpage, Good Web Design
	4 TH	HTML Introduction
9 TH	1 ST	HTML Tags, Anchor Tag
	2 ND	Table Tag
	3 RD	HTML Frames
	4 TH	Forms
10 TH	1 ST	Disadvantages of HTML
	2 ND	Separating style from structure with style sheets
	3 RD	CSS Rules, Types of CSS

	4 TH	Client side Scripting with JavaScript Introduction to script, Client side Scripting, Types of Scripting
11 TH	1 ST	Variables in JavaScript, Built-in Function Arrays in JavaScript, Conditional statements, Loops
	2 ND	Document Object Model Creating Functions, objects in JavaScript
		Working with Cookies
	4 TH	Connecting database using JavaScript in HTML Page
12 TH	1 ST	Working with Browser, validating and submitting Forms
	2 ND	Server Side Scripting Introduction to server side Scripting
	3 RD	Components of SSS Difference between CSS and SSS
	4 TH	Server side Scripting method
13 TH	1 ST	JavaScript on server
	2 ND	SQL
	3 RD	Server Side Programming using PHP Introduction to PHP
	4 TH	Variables, string
14 TH	1 ST	operator types
	2 ND	operator types
	3 RD	Conditional statement
	4 TH	Loops
15 TH	1 ST	Array
	2 ND	GET and POST Method
	3 RD	GET and POST Method
	4 TH	Sessions
DISCIPLINE: IT	SEMESTER:5TH	NAME OF THE TEACHING FACULTY: Sumitra Mahapatra
SUBJECT:SE	NO.OF DAYS/PER WEEK CLASS ALLOTTED:4	SEMESTER FROM DATE: 15/09/2022 TO DATE: 21/01/2023 NO.OF WEEKS:15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 st	1 st	1.1 Program vs. Software product 1.2Emergence of Software Engineering.
	2 nd	1.3 Computer Systems Engineering 1.4Software Life Cycle Models
	3 rd	1.4.1Classical Water fall model
	4 th	1.4.2 Iterative Water fall model
2 nd	1 st	1.4.3Prototyping model
	2 nd	1.4.4 Evolutionary model 1.4.5 Spiral model

	3 rd	2.1 Responsibility of Project Manager 2.2 Project Planning
	4 th	2.3 Metrics for Project size estimation(LOC and FP)
3 rd	1 st	2.4 Project Estimation Techniques
	2 nd	2.5 COCOMO Models, Basic, Intermediate and complete
	3 rd	2.5 COCOMO Models, Basic, Intermediate and complete
	4 th	2.6 Scheduling
4 th	1 st	2.7 Organization and Team structure
	2 nd	2.8 Staffing
	3 rd	2.9 Risk Management
	4 th	2.10 Configuration Management
5 th	1 st	3.1 Requirements gathering and analysis 3.2 Software Requirements Specification
	2 nd	3.2 Software Requirements Specification 3.2.1 Contents of SRS
	3 rd	3.2.2 Characteristics of Good SRS
	4 th	3.2.3 Organization of SRS
6 ^h	1 st	3.2.4 Techniques for representing complexing logic
	2 nd	3.2.4 Techniques for representing complexing logic
	3 rd	4.1 What is a Good S/W design 4.2Cohesion and coupling
	4 th	4.3 Neat arrangement 4.4S/W Design approaches
7 th	1 st	4.5 Structured analysis 4.6 Data Flow Diagrams
	2 nd	4.7Symbols used in DFD 4.8Designing DFD
	3 rd	4.9Developing DFD model of a system
	4 th	4.10Shortcomings of DFD
8 th	1 st	4.11 Structured design
	2 nd	4.12Principles of transformation of DFD to Structure Chart
	3 rd	4.13Transform analysis and Transaction Analysis
	4 th	4.14 Design Review
9 th	1 st	5.1 Characteristics of Good Interface
	2 nd	5.2 Basic concepts of UID
	3 rd	5.2 Basic concepts of UID
	4 th	5.3Types of User interfaces
10 th	1 st	5.3Types of User interfaces
	2 nd	5.4 Components based GUI development
	3 rd	5.4 Components based GUI development
	4 th	5.4 Components based GUI development
11 th	1 st	6.1 Coding 6.2.Code Review

	2 nd	6.2.1 Code walk through
	3 rd	6.2.2 Code inspections and software Documentation
	4 th	6.3 Testing 6.4 Unit testing
12 th	1 st	6.5 Black Box Testing
	2 nd	6.6 Equivalence class partitioning and boundary value analysis
	3 rd	6.7 White Box Testing
	4 th	6.8 Different White Box methodologies statement coverage branch coverage, condition coverage, path coverage, cyclomatic complexity data flow based testing and mutation testing
13 th	1 st	6.8 Different White Box methodologies statement coverage branch coverage, condition coverage, path coverage, cyclomatic complexity data flow based testing and mutation testing
	2 nd	6.9 Debugging approaches 6.10 Debugging guidelines
	3 rd	6.11 Integration Testing
	4 th	6.11 Integration Testing
14 th	1 st	7.1 Software Reliability
	2 nd	7.2 Different reliability metrics
	3 rd	7.2 Different reliability metrics
	4 th	7.3 Reliability growth modeling
15 th	1 st	7.3 Reliability growth modeling
	2 nd	7.4 Software quality
	3 rd	7.4 Software quality
	4 th	7.5 Software Quality Management System
DISCIPLINE: IT	SEMESTER: 5TH	NAME OF THE TEACHING FACULTY: NAYANA PATEL
SUBJECT: MC	NO. OF DAYS/PER WEEK CLASS ALLOTTED: 4	SEMESTER FROM DATE: 15/09/2022 TO DATE: 21/01/2023 NO. OF WEEKS: 15
WEEK	CLASS DAY	THEORY TOPICS
1 ST	1 ST	Networks,
	2 ND	Wireless Networks
	3 RD	Mobile Computing
	4 TH	Mobile Computing Characteristics
2 ND	1 ST	Application of Mobile Computing
	2 ND	Application of Mobile Computing
	3 RD	Introduction to Mobile Development Frameworks C/S architecture
	4 TH	n-tier architecture

3 RD	1 ST	n-tier architecture and www
	2 ND	n-tier architecture and www
	3 RD	Peer-to Peer architecture
	4 TH	Mobile agent architecture
4 TH	1 ST	Introduction to Wireless Transmission Signals
	2 ND	Period, Frequency and Bandwidth. Antennas
	3 RD	Signal Propagation
	4 TH	Multiplexing
5 TH	1 ST	Modulation
	2 ND	Spread Spectrum Cellular System
	3 RD	Introduction to Medium Access Control Hidden/ Exposed Terminals
	4 TH	The basic Access Method
6 TH	1 ST	The basic Access Method
	2 ND	Near / Far Terminals, SDMA
	3 RD	FDMA, TDMA
	4 TH	CDMA
7 TH	1 ST	WIRELESS LANS Wireless LAN and communication, Infrared, Radio Frequency
	2 ND	IR Advantages and Disadvantages RF Advantages and Disadvantages Wireless Network Architecture Logical
	3 RD	Types of WLAN , IEEE802.11, MAC layer
	4 TH	Security, Synchronization
8 TH	1 ST	Power Management, Roaming
	2 ND	Bluetooth Overview
	3 RD	Introduction to Ubiquitous Wireless Communication
	4 TH	Scenario of Mobile Communication
9 TH	1 ST	Mobile Communication Generations 1G to 3G
	2 ND	Mobile Communication Generations 1G to 3G
	3 RD	3 rd Generation Mobile Communication Network
	4 TH	Universal Mobile telecommunication System (UMTS)
10 TH	1 ST	Overview Mobile IP Working with mobile IP
	2 ND	Mobile IP Entities, Mobility Agents

	3 RD	Components of Mobile IP Mobile Ipv6 Features
	4 TH	Mobile Ipv6 Address Types
11 TH	1 ST	Mobile Ipv6 Address Scope.
	2 ND	Mobile IP Operation.
	3 RD	Mobile Computing WWW architecture for Mobile computing Need of WAP Benefits of WAP
	4 TH	Examples of WAP, WAP- Architecture
12 TH	1 ST	WML
	2 ND	WAP Push architecture
	3 RD	Push-Pull based data acquisition
	4 TH	I-mode , WAP 2.x
13 TH	1 ST	Wireless Telecomm Networks GSM
	2 ND	GPRS
	3 RD	IS-95
	4 TH	CDMA-2000
14 TH	1 ST	W-CDMA
	2 ND	Wireless Sensor Networks
	3 RD	Messaging Services Short Message Services (SMS)
	4 TH	Short Message Services (SMS)
15 TH	1 ST	Multimedia Message Services (MMS)
	2 ND	Multimedia Message Services (MMS)
	3 RD	Multimedia transmission over wireless
	4 TH	Multimedia transmission over wireless
DISCIPLINE: IT	SEMESTER:5TH	NAME OF THE TEACHING FACULTY: Sasmita Panigrahi
SUBJECT:CGM	NO.OF DAYS/PER WEEK CLASS ALLOTTED: 4	SEMESTER FROM DATE: 15/09/2022 TO DATE: 21/01/2023 NO.OF WEEKS:15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 ST	1 ST	Applications of Computer Graphics & Multimedia Computer graphics in CAD Presentation Graphics Computer Art Entertainment Education & Training
	2 ND	Visualization Image Processing Graphic User Interface Multimedia Concepts.
	3 RD	Overview of Graphics Systems

		Graphics System
	4 TH	Raster Scan Display
2 ND	1 ST	Random Scan Display
	2 ND	Graphics Input Devices
	3 RD	Graphics Software
	4 TH	Graphics Output primitive Points & Lines DDA Line Drawing Algorithm
3 RD	1 ST	Bresenham's Line drawing Algorithm
	2 ND	Mid Point Circle algorithm
	3 RD	Filled Area Primitives
	4 TH	Boundary fill algorithm, Flood fill algorithm
4 TH	1 ST	Two Dimensional Geometric Transformations Translation Rotation Scaling
	2 ND	Reflection Shear
	3 RD	Matrix representation and Homogenous coordinate system Composite transformation
	4 TH	Two Dimensional Viewing Viewing pipeline Viewing coordinate reference frame
5 TH	1 ST	Window to view port coordinate transformation
	2 ND	Line clipping concept
	3 RD	Polygon clipping concept
	4 TH	Three Dimensional Object Representations Polygon surface
6 TH	1 ST	Polygon table
	2 ND	Plane equation
	3 RD	Plane equation
	4 TH	Polygon mesh
7 TH	1 ST	Quadric surfaces
	2 ND	Sphere, Ellipsoid
	3 RD	Spline representation
	4 TH	Bezier curves & Surfaces
8 TH	1 ST	B-Spline curves & surfaces.
	2 ND	Three Dimensional Geometric & Modeling Transformations Translation Rotation Scaling
	3 RD	Reflection Shear
	4 TH	Composite transformation
9 TH	1 ST	Modeling & Coordinate transformation
	2 ND	Three Dimensional Viewing

		Viewing pipeline
	3 RD	Viewing coordinates
	4 TH	Viewing coordinates
10 TH	1 ST	Parallel projection
	2 ND	Perspective projection
	3 RD	Concept of 3D clipping
	4 TH	Illumination Model & Surface Rendering Methods Different light sources used in 3D modeling
11 TH	1 ST	Basic Illumination model
	2 ND	Ambient light Diffuse reflection
	3 RD	Specular reflection
	4 TH	Introduction to Digital Audio Basics of Acoustics, Psychoacoustics
12 TH	1 ST	Musical sound and noise
	2 ND	Elementary sound system
	3 RD	Microphones, Amplifiers
	4 TH	Digital audio formats
13 TH	1 ST	Audio compression (LPC, Sub Band Encoding)
	2 ND	Introduction to Digital Image Vector and raster Graphics
	3 RD	Digital representation of image, colour, 16 bit, 24 bit colour depth Colour Characteristics-Hue, saturation, Luminance
	4 TH	Colour Palette Image formats-JPEG, BMP, TIFF, GIFF
14 TH	1 ST	Image evaluation Layers
	2 ND	Filters
	3 RD	Image manipulation-scaling, cropping, rotation
	4 TH	Introduction to Video Video in Multimedia
15 TH	1 ST	Basics of Motion-Video Sources of Motion-Video
	2 ND	Video formats, lines, frames, fields
	3 RD	TV Broadcast standards-PAL, NTSC, SECAM
	4 TH	MPEG Compression
DISCIPLINE:IT	SEMESTER:5TH	NAME OF THE TEACHING FACULTY: Smt Sumitra Maharapatra
SUBJECT:WD LAB	NO.OF DAYS/PER WEEK CLASS ALLOTTED:4	SEMESTER FROM DATE: 15/09/2022 TO DATE: 21/01/2023 NO.OF WEEKS:15
WEEK	DATE	TOPICS TO BE COVERED AS PER LESSON PLAN

1 ST	1 ST	DEVELOPING PORTALS USING HTML Introduction to HTML 5 and CSS 3
	2 ND	Basic structure of HTML, designing a web page
	3 RD	Basic structure of HTML, designing a web page
	4 TH	Basic structure of HTML, designing a web page
2 ND	1 ST	inserting links images, horizontal rules, comments.
	2 ND	inserting links images, horizontal rules, comments.
	3 RD	inserting links images, horizontal rules, comments.
	4 TH	inserting links images, horizontal rules, comments.
3 RD	1 ST	Formatting text, title, headings, colors, fonts, sizes, simple tables and forms. HTML tags, hyperlinks.
	2 ND	Formatting text, title, headings, colors, fonts, sizes, simple tables and forms. HTML tags, hyperlinks.
	3 RD	Formatting text, title, headings, colors, fonts, sizes, simple tables and forms. HTML tags, hyperlinks.
	4 TH	Formatting text, title, headings, colors, fonts, sizes, simple tables and forms. HTML tags, hyperlinks.
4 TH	1 ST	Formatting text, title, headings, colors, fonts, sizes, simple tables and forms. HTML tags, hyperlinks.
	2 ND	Formatting text, title, headings, colors, fonts, sizes, simple tables and forms. HTML tags, hyperlinks.
	3 RD	Adding graphics and images, image maps, image files.
	4 TH	Adding graphics and images, image maps, image files.
5 TH	1 ST	Adding graphics and images, image maps, image files.
	2 ND	Adding graphics and images, image maps, image files.
	3 RD	Adding graphics and images, image maps, image files.
	4 TH	Using tables, forms, style sheets and frames.

6 TH	1 ST	Using tables, forms, style sheets and frames.
	2 ND	Using tables, forms, style sheets and frames.
	3 RD	Using tables, forms, style sheets and frames.
	4 TH	Using tables, forms, style sheets and frames.
7 TH	1 ST	Floating of web site/pages
	2 ND	Floating of web site/pages
	3 RD	Floating of web site/pages
	4 TH	Introduction to PHP: How PHP Works
8 TH	1 ST	Introduction to PHP: How PHP Works
	2 ND	The php.ini File, Basic PHP Syntax, PHP variables, statements, operators
	3 RD	The php.ini File, Basic PHP Syntax, PHP variables, statements, operators
	4 TH	The php.ini File, Basic PHP Syntax, PHP variables, statements, operators
9 TH	1 ST	The php.ini File, Basic PHP Syntax, PHP variables, statements, operators
	2 ND	The php.ini File, Basic PHP Syntax, PHP variables, statements, operators
	3 RD	decision making, loops, arrays, strings
	4 TH	decision making, loops, arrays, strings
10 TH	1 ST	decision making, loops, arrays, strings
	2 ND	decision making, loops, arrays, strings
	3 RD	decision making, loops, arrays, strings
	4 TH	forms, get and post methods, functions.
11 TH	1 ST	forms, get and post methods, functions.

	2 ND	forms, get and post methods, functions.
	3 RD	Introduction to cookies, storage of cookies at client side, Using information of cookies.
	4 TH	Introduction to cookies, storage of cookies at client side, Using information of cookies.
12 TH	1 ST	Introduction to cookies, storage of cookies at client side, Using information of cookies.
	2 ND	Creating single or multiple server side sessions.
	3 RD	Creating single or multiple server side sessions.
	4 TH	Creating single or multiple server side sessions.
13 TH	1 ST	Timeout in sessions, Event management in PHP
	2 ND	Timeout in sessions, Event management in PHP
	3 RD	Timeout in sessions, Event management in PHP
	4 TH	Introduction to content management systems based on PHP.
14 TH	1 ST	Introduction to content management systems based on PHP.
	2 ND	Introduction to MySQL,
	3 RD	connecting to MySQL
	4 TH	database, creation, insertion, deletion
15 TH	1 ST	database, creation, insertion, deletion
	2 ND	database, creation, insertion, deletion
	3 RD	retrieval of MySQL data using PHP.
	4 TH	retrieval of MySQL data using PHP.
DISCIPLINE: IT	SEMESTER:5TH	NAME OF THE TEACHING FACULTY: Anuradha Maharana
SUBJECT: PYTHON	NO.OF DAYS/PER	SEMESTER FROM DATE:

LAB	WEEK	15/09/2022	TO DATE:21/01/2023
	CLASS ALLOTTED:4	NO.OF WEEKS:15	
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS	
1 st	1 st	Introduction, Brief History of Python, Python Versions	
	2 nd	Installing Python	
	3 rd	Environment Variables	
	4 th	Executing Python from the Command Line	
2 nd	1 st	IDLE	
	2 nd	Editing Python Files	
	3 rd	Python Documentation	
	4 th	Getting Help	
3 rd	1 st	Dynamic Types	
	2 nd	Python Reserved Words	
	3 rd	Naming Conventions	
	4 th	Basic Syntax	
4 th	1 st	Comments	
	2 nd	String Values	
	3 rd	The format Method	
	4 th	String Operators	
5 th	1 st	Numeric Data Types	
	2 nd	Conversion Functions	
	3 rd	Simple Output	
	4 th	Simple Input	
6 ^h	1 st	The % Method	

	2 nd	The print Function
	3 rd	Indenting Requirements
	4 th	The if Statement
7 th	1 st	Relational and Logical Operators
	2 nd	Bit Wise Operators
	3 rd	The while Loop
	4 th	break and continue
8 th	1 st	The for Loop
	2 nd	Collections Introduction
	3 rd	Lists
	4 th	Tuples
9 th	1 st	Sets
	2 nd	Dictionaries
	3 rd	Sorting Dictionaries
	4 th	Copying Collections
10 th	1 st	Introduction ,Defining Your Own Functions
	2 nd	Parameters ,Function Documentation
	3 rd	Keyword and Optional Parameters
	4 th	Passing Collections to a Function
11 th	1 st	Variable Number of Arguments
	2 nd	Scope ,Functions - "First Class Citizens" Passing Functions to a Function
	3 rd	map ,filter
	4 th	Mapping Functions in a Dictionary
12 th	1 st	Lambda, Inner Functions

	2 nd	Closures
	3 rd	Modules, Standard Modules - sys
	4 th	Standard Modules - math
13 th	1 st	Standard Modules - time
	2 nd	The dir Function
	3 rd	Errors , Runtime Errors
	4 th	The Exception Model ,Exception Hierarchy ,Handling Multiple Exceptions, Raise , assert
14 th	1 st	Classes in Python ,Principles of Object Orientation,Creating Classes
	2 nd	Instance Methods,File Organization,Special Methods, Class Variables
	3 rd	Inheritance,Polymorphism
	4 th	Introduction,Simple Character Matches ,Special Characters,Character Classes
15 th	1 st	Quantifiers , The Dot Character ,Greedy Matches Grouping , Matching at Beginning or End
	2 nd	Match Objects ,Substituting
	3 rd	Splitting a String ,Compiling Regular Expressions
	4 th	Flags
DISCIPLINE:IT	SEMESTER:5TH	NAME OF THE TEACHING FACULTY: SASMITA PANIGRAHI
SUBJECT: CGM Lab	NO.OF DAYS/PER WEEK CLASS ALLOTTED:4	SEMESTER FROM DATE: 15/09/2022 TO DATE:21/01/2023
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 ST	1 ST	Program to implement a line using slope intercept formula.
	2 ND	Program to implement a line using slope intercept formula.
	3 RD	Program to implement line using DDA algorithm.
	4 TH	Program to implement line using DDA algorithm.
2 ND	1 ST	Program to implement line using Bresenham's algorithm

	2 ND	Program to implement line using Bresenham's algorithm
	3 RD	Program to implement circle using mid-point algorithm
	4 TH	Program to implement circle using mid-point algorithm
3 RD	1 ST	Program to implement translation of a line and triangle.
	2 ND	Program to implement translation of a line and triangle.
	3 RD	Program to implement rotation of a line and triangle
	4 TH	Program to implement rotation of a line and triangle
4 TH	1 ST	Program to implement scaling transformation
	2 ND	Program to implement scaling transformation
	3 RD	Write a program using function & Fill the Circle with Red color
	4 TH	The concept of Photoshop
5 TH	1 ST	How to open a document. How to save the documents.
	2 ND	How to open a document. How to save the documents.
	3 RD	How to create a new document with the needed resolution.
	4 TH	How to create a new document with the needed resolution.
6 TH	1 ST	How to select an area, copy and paste the selection.
	2 ND	How to select an area, copy and paste the selection.
	3 RD	How to save images for the web and their formats.
	4 TH	How to save images for the web and their formats.
7 TH	1 ST	The use of layers and the history palette. How to print our document.
	2 ND	The use of layers and the history palette. How to print our document.
	3 RD	How to use the text editor. How to Crop Image in Photoshop & Sharpen Image
	4 TH	How to use the text editor. How to Crop Image in Photoshop & Sharpen Image
8 TH	1 ST	Procedure to Removing & Adding Backgrounds images. Procedure to Convert Color Photos to Black & White.
	2 ND	Procedure to Removing & Adding Backgrounds images. Procedure to Convert Color Photos to Black & White.
	3 RD	Procedure to Removing & Adding Backgrounds images. Procedure to Convert Color Photos to Black & White.
	4 TH	How to Create a Passport size images? How to

		Change Eye Color & Hair Color
9 TH	1 ST	How to Create a Passport size images? How to Change Eye Color & Hair Color
	2 ND	How to Add Rain in Photoshop? How to make a GIFs File?
	3 RD	How to Add Rain in Photoshop? How to make a GIFs File?
	4 TH	Procedure to create an animation to represent the growing moon
10 TH	1 ST	Procedure to create an animation to represent the growing moon
	2 ND	Procedure to create an animation to indicate a ball bouncing on steps.
	3 RD	Procedure to create an animation to indicate a ball bouncing on steps
	4 TH	Procedure to create an animation to indicate a ball bouncing on steps
11 TH	1 ST	Procedure to simulate movement of a cloud. Procedure to draw the fan blades and to give proper animation. Procedure to display the background given (filename: tulip.jpg) through your name.
	2 ND	Procedure to simulate movement of a cloud. Procedure to draw the fan blades and to give proper animation. Procedure to display the background given (filename: tulip.jpg) through your name.
	3 RD	Procedure to create an animation
	4 TH	Procedure to create an animation
12 TH	1 ST	Procedure to design a visiting card containing at least one graphic and text information
	2 ND	Procedure to design a visiting card containing at least one graphic and text information
	3 RD	Procedure to design a visiting card containing at least one graphic and text information
	4 TH	Procedure to design a visiting card containing at least one graphic and text information
13 TH	1 ST	Procedure to prepare a cover page for the book in your subject area. Plan your own design. Procedure to adjust the brightness and contrast of the picture so that it gives an elegant look
	2 ND	Procedure to prepare a cover page for the book in your subject area. Plan your own design. Procedure to adjust the brightness and contrast of the picture so that it gives an elegant look

	3 RD	Procedure to prepare a cover page for the book in your subject area. Plan your own design. Procedure to adjust the brightness and contrast of the picture so that it gives an elegant look
	4 TH	Procedure to prepare a cover page for the book in your subject area. Plan your own design. Procedure to adjust the brightness and contrast of the picture so that it gives an elegant look.
14 TH	1 ST	Procedure to prepare a cover page for the book in your subject area. Plan your own design. Procedure to adjust the brightness and contrast of the picture so that it gives an elegant look.
	2 ND	Procedure to prepare a cover page for the book in your subject area. Plan your own design. Procedure to adjust the brightness and contrast of the picture so that it gives an elegant look.
	3 RD	Procedure to position the picture preferably on a plain background of a colour of your choice - positioning includes rotation and scaling
	4 TH	Procedure to position the picture preferably on a plain background of a colour of your choice - positioning includes rotation and scaling
15 TH	1 ST	Procedure to position the picture preferably on a plain background of a colour of your choice - positioning includes rotation and scaling
	2 ND	Procedure to type a word and apply the effects shadow embosses
	3 RD	Procedure to type a word and apply the effects shadow embosses
	4 TH	Procedure to type a word and apply the effects shadow embosses