FGM Govt College Adampur

Unit wise Lesson Plan for even Semester 2022

Department : Computer Science

Teacher : Miss SanjuChaudhary **Class : B.Sc. 6th semester**

Subject : Computer Graphics

Sr. No.	Description of Chapters/Topics	Expected Duration	Assignment/Test
1.	**Introduction :**Historical prespective of computer graphics , basic elements of Computer graphics (modeling , Rendering .Animation). Applications of Computer Graphics. **Input Devices :** Keyboard , Mouse , Light pen , Graphic Tablets , Joystics , Trackball , Flatbed Scanner **Hard Copy Devices :** Laser printer , Flatbed Plotters **Video Display Devices :**Pixel. Resolution, Aspect ratio. Refresh Rate and Interlacing. Cathode Ray tube , Flat Panel Display-LCD and Plasma Panel. Raster and Random scan display system.	**1 April 2022**	**Assignment-1 in the beginning of last week of May.**
2.	**Fundamental Techniques in Graphics :**Line Generation Algorithms –DDA Algorithm. And Midpoint Circle Algorithm. Polygon Filling Algorithms – Scan Line Algorithm. Viewing & Clipping-point Clipping and Line Clipping. Cohen – Sutherland Line Clipping Algorithm. Polygon Clipping (Sutherland Hodgman Algorithm)	**May 2022**	**Assignment-2 in the beginning of last week of June.**
3.	**2-Dimensional Graphics :**Cartesian and Homogeneous Co-ordinate system . Geometric Transformations (Translation, Scaling ,Rotation,Reflection). **3-Dimensional Graphics :** Geometric Transformations (Translation, Scaling , Rotation , Reflection , Mathematics of Projections (Parallel & Perspective)	**15 JUNE 2022**	**Minor Test &Revision .**

30/5/22

Ms. SanjuChaudhary

(Department of Computer Science)

FGM Govt College Adampur

Unit wise Lesson Plan for even Semester 2022

Department : Computer Sci.

Teacher : Miss Sanju Chaudhary

Class : B.Sc. 6th semester

Subject :PYTHON PROGRAMMING

Sr. No.	Description of Chapters/Topics	Expected Duration	Assignment/Test
1.	**Introduction to Python :** History and Features of Python programming, python interpreter, variable identifiers and literal , token , keywords, data types , arithimatic operators , membership operators, identify operators, operators precedence, identation and need for identation . **Built In functions :**input, eval, composition, print, type, round, min & max pow, type conversion, random number, generation mathematical functions . Getting help on a function. Assert Statement . **Control Statements :** if conditional statement, for and while statements break, continue and pass statements.	1 April 2022	Assignment-1 in the beginning of last week of May.
2.	**Functions :**Function definition and call , function arguments – variable function arguments, default arguments, keyword arguments , arbitrary arguments, command line arguments, global and local variables in same code. Using global variable and local variable with same name. **Strings :**String as a compound data type . String operations- concentration, repetition, membership operations, slicing operation, string method count, find ,capitalize, title, lower, upper, swapcase, islower, isupper, istitle, replace, isalpha, isdigit, isalnum. String processing examples .	May 2022	Assignment-2 in the beginning of last week of June.
3.	**Lists :**List operations, multiplication, concentration, length, indexing, slicing, min, max, sum, membership operators, List functions – append , extend, remove pop, count, index, insert, sort, reverse. **Recursion :**Recrusive solutions for problems on Numbers, strings and list. **Object Oriented Programming :**Introduction to classes, method, class object, instance object , method object. Class as abstract data type , data class. Access attributes using functions – gettatar, hasattar, setattar, delattar, built in class,attributes of class objects (–diet-.-name—module–). **Graphics :**Screen objects – points and lines , box, polygon, circle, arc, screen object methods-move-to(). Move-by(), rotate-by(), Text(). Sound(). Play sound(). Stop-sound().	15 JUNE 2022	Minor Test &Revision .

20/5/22

Ms. SanjuChaudhary

(Department of Computer Science)

Lesson Plan 2022

FGM Government College, Adampur

Unit wise Lesson Plan for even Semester

Teacher : MS SANJU CHAUDHARY

subject : List of experiments using PYTHON (Practical)

CLASS - B.SC VI Sem. (C.S)

SR NO	Description of Experiments	Expected Duration	Practical / Test
1.	Write a Prog. to convert decimal number into binary Octal and Hexa decimal no. system using built-in function.	1 April 2022.	Practice. Checked Pratical File
2.	Write a Prog. to find the H.C.F of two input no.. using function.		
3.	Write a Prog. to Slice List.		
4.	Write a Prog to Change or add elements to a list.		
5.	Write a Prog. to display Calender of given month of the year.		
6.	Write a Prog. to Compute factorial of a number using recursion.	1 May 2022	Practice. Checked Practical file
7.	Write a Prog to reverse the string using recursion.		
8.	Write a Prog. to create copy of list using recursion		
9.	Write a Prog. to implement Bresenham's line drawing algorithm.		

Sr No	Description of Experiments	Expected Duration	Practical Practice.
10.	Write a Prog to implement mid Point Circle drawing algorithm.	25 May 5 June	Practice checked Practical file.
11.	Write a Prog. to clip a line using Cohen and Sutherland line clipping algorithm.		
12.	Write a Prg. to clip a Palygon using Sutherland Hodgeman algorithm.		
13.	Write a Prog to apply various 2D transformations.		

20/5/22

(SANJU CHAUDHARY)
Deptt of Comp. Science

Lesson Plan-2022

FGM Govt. College, Adampur

Unit wise lesson Plan for even Semester

Name-SANJU CHAUDHARY [1 April to 15 June 2022]

Sub:- E.V.S CLASS-B.A IInd Y.

SR. No	Description of Topics	Expected Duration	Assignment/ Test
	UNIT-III		
1.	Definition of environment Pollution, Causes, effects and control measures of:- Air Pollution, water Pollution Soil Pollution, Noise Pollution Nuclear Hazard and human health risks:- Solid waste Management causes effects and control measures of Urban and industrial wastes Pollution Case studis: Disaster Management: floods, earthquakes cyclone and landslides: Climate Change global warming, acid rain, Ozone layer depletion: different laws related to environment:	1 April 2022	I Assignment begining of last Month
2.	Environment Protection Act; wild life Protection Act, Air (Prevention and control of Pollution) Act, water (Prevention and Control of Pollution) Act wild life Protection act. forest Conservation Act. International Agreements Montreal & Kyoto Protocal & Nature reserves, tribal Populations and Human Health.	1 May 2022	II Assignment begining of last Month.

UNIT-4

3.	Concept of Sustainability & Sustainable development, Water Concervation, rain water harvesting, watershed management, Resettlement and rehabilitation of Project affected Persons Case Studies: Environmet Ethics, Role of Indian and other religions and Cultures in environmental Conservation. Environmental Communication and Public awareness, Case Studies (eg. CNG Vehicles in Delhi) Human Population growth: Impact on environment; Human health & welfare Enviornental Movements Chipko, Slient valley, Bishnoi of Rajsthan	15 JUNE 2022.	Minor Test in the Month. & Revision.

15/05/22

(SANJU CHAUDHARY)

Deptt. of Computer Scienc

Lesson Plan for Even Semester April-June 2021

Department: B.Sc. Computer Science

Name of the Teacher: Vinod Prakash **Subject :- Computer Networks**

Class : B.Sc. Computer Science **Semester :- 4th**

Sr. No.	Description of Chapters/ Topics /Units		Duration
	COMPUTER NETWORKS	**SOFTWARE ENGINEERING**	
1	**UNIT – I** Introduction to Computer Communications and Networking Technologies, Uses of Computer Networks, Network Devices, Nodes, and Hosts, Types of Computer Networks and their Topologies, OSI Reference Model, TCP/IP Reference Model. **UNIT – II** Analog and Digital Communications Concepts: Representing Data as Analog Signals, Representing Data as Digital Signals, Data Rate and Bandwidth, Capacity, Baud Rate; Digital Carrier Systems; Guided and Wireless Transmission Media; Communication Satellites; Switching and Multiplexing.	**UNIT – I** Introduction: Program vs. Software, Software Engineering paradigms, Software Crisis – problem and causes. Phases in Software development: Requirement, Analysis, Software Design, Coding, Testing, Maintenance. Software Development Process Models: Waterfall, Prototype, Evolutionary and Spiral models. **UNIT – II** Software Requirement Analysis and Specifications: Feasibility Study Software Requirements Need for SRS, Characteristics of an SRS, Components of an SRS, Structure of a requirements document, validation and metrics. Problem Analysis, Data Flow Diagram, Data Dictionary, Decision table, Decision trees	April 1st to 30th April
	Assessment test, Assignment		Last week of April

2	**UNIT - III** Data Link Layer: Framing, Flow Control, Error Control, Error Detection and Correction, Sliding Window Protocols, Media Access Control, Random Access Protocols, Token Passing Protocols, Token Ring, Ethernet, gigabit Ethernet, token ring, FDDI, Bluetooth and Wi-Fi. **UNIT – IV** Network Layer and Routing Concepts: Virtual Circuits and Datagrams, Routing Algorithms, Flooding, Shortest Path Routing, Distance Vector Routing, Link State Routing, Hierarchical Routing, Congestion Control Algorithms, Internetworking, IPV4 and IPV6.	**UNIT – III** Software Project Planning: Process Planning, Effort estimation, COCOMO model, Project scheduling and Staffing, team structure, Software configuration management, Quality assurance plans, Risk Management, Project monitoring plans. Software Implementation and Maintenance: Type of maintenance, Management of Maintenance, Maintenance Process, maintenance characteristics. **UNIT- IV** Testing: Testing fundamentals, Error, Fault, and Failure, Test Oracle, Test Case and Test Criteria, Psychology of testing, Black Box Testing, Equivalence Class Partitioning, Boundary value analysis, Cause-effect graphing, White box testing, Control flow-based criteria, level of testing, Unit testing, Integration testing, System testing, Validation testing, alpha, beta, and Acceptance testing	May 1st to 30th May
Assignment			

Lesson Plan

Name of Assistant Professor: - Mr. Narender Kumar
Class: - B.Sc. Computer Science 1st Year 2nd Semester
Subject: - CCsL – 204 Data Structure Using 'C'

Month	Topics Covered
April	Unit 1 (Data Structure Basics, Arrays), Unit 4 (Searching)
May	Unit 1 (Stacks, Recursion), Unit 2 (Queues, Linked List), Unit 4 (Sorting) **Assignment**
June (1st-15th)	Unit 3 (Trees and Graphs) **Test**

20.05.2022

Lesson Plan

Name of Assistant Professor: - Mr. Narender Kumar
Class: - B.Sc. Computer Science 1st Year 2nd Semester
Subject: - CCsL – 205 Computer Organisation

Month	Topics Covered
April	Unit 1 (Data Representation), Unit 2 (Logic Gates)
May	Unit 2 (Boolean Algebra), Unit 3 (Combinational Circuits, Sequential Circuits) **Test**
June (1st-15th)	Unit 4 (Basic Computer Organization and Design, Programming the basic Computer, Input-Output Organization) **Assignment**

20.05.2022