

**NBGSM College**

Lesson Plan November 2020- February 2020

**Name of assistant**

**Professor :**

Rajnish Kumar

**Class :**

BCA

**Semester:**

FIRST

**Subject:**

LOGICAL ORGANIZATION OF COMPUTER-I

		Day	Date	Topic
<b>1st week</b>	Sunday		01-Nov-20	
		1	02-Nov-20	Computer Architecture
		2	03-Nov-20	Digital Logic
		3	04-Nov-20	Organization and Design Of Computer
		4	05-Nov-20	Analog and Digital signals
		5	06-Nov-20	Memory Organization
		6	07-Nov-20	Primary and secondary memory
	Sunday		08-Nov-20	
<b>2nd week</b>		1	09-Nov-20	Number System And Its Type
		2	10-Nov-20	Conversion a Number System into An Another Number System
		3	11-Nov-20	Conversion Octal,Binary,Hexadecimal to Decimal Number
		4	12-Nov-20	Conversion Decimal Number System to Octal,Binary,Hexadecimal
		5	13-Nov-20	Diwali Vacation
		6	14-Nov-20	
	Sunday		15-Nov-20	
<b>3rd week</b>		1	16-Nov-20	
		2	17-Nov-20	Conversion Binary to Octal and Octal to Binary
		3	18-Nov-20	Conversion Binary to Hexadecimal and
		4	19-Nov-20	Hexadecimal to Binary
		5	20-Nov-20	Conversion Hexadecimal to Octal and Octal to Hexadecimal
		6	21-Nov-20	Binary arithmetic, Addition
	Sunday		22-Nov-20	
<b>4th week</b>		1	23-Nov-20	Binary Subtraction
		2	24-Nov-20	1's And 2's Complement
		3	25-Nov-20	Subtraction using 1's And 2's Complement
		4	26-Nov-20	Binary Multiplication
		5	27-Nov-20	Fixed-point and Floating-point representation of numbers
		6	28-Nov-20	Operation on Floating Point Numbers
	Sunday		29-Nov-20	
<b>5th week</b>			30-Nov-20	Holiday
		1	01-Dec-20	Binary Codes
		2	02-Dec-20	BCD codes

		3	03-Dec-20	Errors in Digital Communication
		4	04-Dec-20	Error Detecting And Correcting Codes
		5	05-Dec-20	Character Representation in Binary
	Sunday		06-Dec-20	
6th week		1	07-Dec-20	ASCII codes
		2	08-Dec-20	EBCDIC Codes
		3	09-Dec-20	Unicode
		4	10-Dec-20	Addition and Subtraction of BCD
		5	11-Dec-20	Basic Gates and Logic
		6	12-Dec-20	Universal Gates
	Sunday		13-Dec-20	
7th week				
		1	14-Dec-20	Circuit and Boolean Algebraic Equation
		2	15-Dec-20	Forms of Boolean Algebra
		3	16-Dec-20	Boolean theorem
		4	17-Dec-20	D-Morgan Law
		5	18-Dec-20	Boolean Functions and Truth Tables
		6	19-Dec-20	Canonical and Standard forms of Boolean functions
	Sunday		20-Dec-20	
8th week				
		1	21-Dec-20	Minimize a Boolean Function
		2	22-Dec-20	Venn Diagram
		3	23-Dec-20	Karnaugh Map
		4	24-Dec-20	Different Forms Of K-Map
		5	25-Dec-20	Minimizing using K-Map
		6	26-Dec-20	HOLIDAY
	Sunday		27-Dec-20	
9th week				
		1	28-Dec-20	K-Map with Don't Care
		2	29-Dec-20	Solution K-Map, POS and SOP Forms
		3	30-Dec-20	Maximization Boolean Expression
		4	31-Dec-20	Minimization Boolean Expression
		1	01-Jan-21	Solve Boolean Exp. Using Standard Law
		2	02-Jan-21	Solve Boolean Exp. Using Standard Law
	Sunday		03-Jan-21	
10th week		1	04-Jan-21	Introduction to digital signals,
		2	05-Jan-21	Analog Signal, Diff. between Analog and
		3	06-Jan-21	Digital Signal
		4	07-Jan-21	Basic Gates – AND, OR, NOT
		5	08-Jan-21	Venn Diagram Of AND,OR,NOT
		6	09-Jan-21	Universal Gates NOR,NAND,XOR,XNOR
	Sunday		10-Jan-21	
11th week		1	11-Jan-21	Circuit and Implementation of Gates
		2	12-Jan-21	Implementation of Basic gates using NOR
		3	13-Jan-21	Implementation of Basic gates using NAND
		4	14-Jan-21	Implementation of XOR using NAND,NOR

		5	15-Jan-21	AND-OR-INVERT
		6	16-Jan-21	Multilevel Implementation
	Sunday		17-Jan-21	
<b>12th week</b>		1	18-Jan-21	OR-AND-INVERT
		2	19-Jan-21	Multilevel NAND circuit
		3	20-Jan-21	Multilevel NOR circuit
		4	21-Jan-21	Combinational Logic
		5	22-Jan-21	Characteristics Combinational circuit
		6	23-Jan-21	Procedures, analysis procedures
	Sunday		24-Jan-21	
<b>13th week</b>		1	25-Jan-21	Half adder
		2	26-Jan-21	HOLIDAY
		3	27-Jan-21	Full adder
		4	28-Jan-21	Parallel binary adder
		5	29-Jan-21	Half subtractor
		6	30-Jan-21	Full subtractor
	Sunday		31-Jan-21	
<b>14th week</b>				
			01-Feb-21	4 bit binary adder subtractor
		1	02-Feb-21	Decoder combinational logic
		2	03-Feb-21	3x8 line decoder
		3	04-Feb-21	BCD to decimal decoder
		4	05-Feb-21	Encoder combinational logic
		5	06-Feb-21	Octal to BCD Encoder
	Sunday		07-Feb-21	
<b>15th week</b>				
		1	08-Feb-21	Decimal to BCD Encoder
		2	09-Feb-21	Multiplexer logic
		3	10-Feb-21	4x1 line Multiplexer
		4	11-Feb-21	8x1 line Multiplexer
		5	12-Feb-21	Demultiplexer
		6	13-Feb-21	1x4 Demultiplexer
	Sunday		14-Feb-21	
<b>16th week</b>				
		1	15-Feb-21	PROBLEM DISCUSSION
		2	16-Feb-21	HOLIDAY
		3	17-Feb-21	1x8 Demultiplexer
		4	18-Feb-21	Comparators
		5	19-Feb-21	7 segment display
		6	20-Feb-21	BCD to 7 segment display
	Sunday		21-Feb-21	
<b>17th week</b>				
		1	22-Feb-21	Code converter
		2	23-Feb-21	Problem solve
		3	24-Feb-21	Problem solve
		4	25-Feb-21	Problem solve
		5	26-Feb-21	PROBLEM DISCUSSION
		6	27-Feb-21	PROBLEM DISCUSSION

	Sunday		28-Feb-21	
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<b>NBGSM College</b>
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Lesson Plan November 2020- February 2020

**Name of assistant** Rajnish Kumar  
**Class :** BCA  
**Semester:** THIRD  
**Subject:** DATA STRUCTURE-I

		Day	Date	Topic
<b>Ist week</b>	Sunday		01-Nov-20	
		1	02-Nov-20	Introduction to data structure
		2	03-Nov-20	Elementary data organization
		3	04-Nov-20	Data types in c
		4	05-Nov-20	Derived data types
		5	06-Nov-20	Data type vs. data structure
		6	07-Nov-20	Structure in c
	Sunday		08-Nov-20	
<b>2nd week</b>		1	09-Nov-20	Implementation of structure
		2	10-Nov-20	Structure and pointer
		3	11-Nov-20	Union in c
		4	12-Nov-20	Categories of data structures
		5	13-Nov-20	Diwali Vacation
		6	14-Nov-20	
	Sunday		15-Nov-20	
<b>3rd week</b>		1	16-Nov-20	
		2	17-Nov-20	
		3	18-Nov-20	Operations Data structure, Insert,Delete
		4	19-Nov-20	Operations Traversing, Merging, Sorting
		5	20-Nov-20	Applications of data structures
		6	21-Nov-20	Algorithm
	Sunday		22-Nov-20	
<b>4th week</b>		1	23-Nov-20	Rules for making an algorithm
		2	24-Nov-20	Complexity of an algorithm
		3	25-Nov-20	Algorithm time-space tradeoff
		4	26-Nov-20	Big-O notataion.
		5	27-Nov-20	Introduction to a String
		6	28-Nov-20	Storing strings in memory
	Sunday		29-Nov-20	
<b>5th week</b>			30-Nov-20	Holiday
		1	01-Dec-20	Implementation of a string

		2	02-Dec-20	Operation on a string, input, display
		3	03-Dec-20	Length finding, copying, reverse
		4	04-Dec-20	Concatenate a string, convert lower and upper case
		5	05-Dec-20	String Pattern matching
	Sunday		06-Dec-20	
<b>6th week</b>		1	07-Dec-20	Boyer moore algo. string matching
		2	08-Dec-20	Introduction to an array
		3	09-Dec-20	Types of array
		4	10-Dec-20	Memory representation of linear array
		5	11-Dec-20	Memory representation of 2-D array
		6	12-Dec-20	Address calculation in 1-D array
	Sunday		13-Dec-20	
<b>7th week</b>				
		1	14-Dec-20	Address calculation in 2-D array
		2	15-Dec-20	Address calculation in multi dimension array
		3	16-Dec-20	Operation performed on array
		4	17-Dec-20	Insert, Delete
		5	18-Dec-20	Traversing, Sorting, Merging
		6	19-Dec-20	Selection Sort, Bubble Sort
	Sunday		20-Dec-20	
<b>8th week</b>				
		1	21-Dec-20	Merge Sort
		2	22-Dec-20	Insertion Sort
		3	23-Dec-20	Searching in an array, Sequential search
		4	24-Dec-20	Binary Search
		5	25-Dec-20	Parallel Array, Sparse array
		6	26-Dec-20	HOLIDAY
	Sunday		27-Dec-20	
<b>9th week</b>				
		1	28-Dec-20	Array and pointer
		2	29-Dec-20	Introduction to a linked list
		3	30-Dec-20	Representation of a linked list in memory
		4	31-Dec-20	Stack: Introduction
		1	01-Jan-21	Array and linked representation of stacks
		2	02-Jan-21	Operations on stacks,
	Sunday		03-Jan-21	
<b>10th week</b>		1	04-Jan-21	Implement of PUSH operation
		2	05-Jan-21	Implement of POP, Traverse operation
		3	06-Jan-21	Applications of stacks
		4	07-Jan-21	Polish notation, prefix, postfix, infix
		5	08-Jan-21	Recursion
		6	09-Jan-21	Stack implement infix to postfix
	Sunday		10-Jan-21	
<b>11th week</b>		1	11-Jan-21	Stack implement infix to prefix
		2	12-Jan-21	Queues: Introduction
		3	13-Jan-21	Array and linked representation of queues

		4	14-Jan-21	Operations on queues
		5	15-Jan-21	Types of Queue
		6	16-Jan-21	Double Ended Queue
	Sunday		17-Jan-21	
12th week		1	18-Jan-21	Circular Queue and its implementation
		2	19-Jan-21	Deque, Priority Queues
		3	20-Jan-21	Applications of queues
		4	21-Jan-21	Linked List: Introduction
		5	22-Jan-21	Array vs. linked list
		6	23-Jan-21	Operation performed on linked list
	Sunday		24-Jan-21	
13th week		1	25-Jan-21	Insertion, Deletion
		2	26-Jan-21	HOLIDAY
		3	27-Jan-21	Traversal
		4	28-Jan-21	Types of linked list
		5	29-Jan-21	Insertion into beginning, into end
		6	30-Jan-21	Deletion from beginning, from end
	Sunday		31-Jan-21	
14th week				
			01-Feb-21	Circular linked list
		1	02-Feb-21	Two-way linked list
		2	03-Feb-21	Garbage collection
		3	04-Feb-21	Threaded lists, Applications of linked lists
		4	05-Feb-21	Tree: Introduction, Basic terminology
		5	06-Feb-21	Representing Binary tree in memory
	Sunday		07-Feb-21	
15th week				
		1	08-Feb-21	Operation on a tree,
		2	09-Feb-21	Insert and Delete a node
		3	10-Feb-21	Types of binary tree
		4	11-Feb-21	Inorder,Preorder,Postorder Traversing
		5	12-Feb-21	Binary Search Tree
		6	13-Feb-21	Traversal algorithms using stacks.
	Sunday		14-Feb-21	
16th week				
		1	15-Feb-21	
		2	16-Feb-21	HOLIDAY
		3	17-Feb-21	Linked list view of a binary tree
		4	18-Feb-21	Tree making example
		5	19-Feb-21	Graph: Introduction
		6	20-Feb-21	Graph theory terminology
	Sunday		21-Feb-21	
17th week				
		1	22-Feb-21	Types of graph
		2	23-Feb-21	Sequential and linked representation of graphs
		3	24-Feb-21	REVISION
		4	25-Feb-21	REVISION
		5	26-Feb-21	REVISION

		6	27-Feb-21	REVISION
	Sunday		28-Feb-21	

**NBGSM College**

Lesson Plan November 2020- February 2020

**Name of assistant**   Rajnish Kumar  
**Class :**                 BCA  
**Semester:**             FIFTH  
**Subject:**               COMPUTER GRAPHICS

		Day	Date	Topic
<b>1st week</b>	Sunday		01-Nov-20	
		1	02-Nov-20	Introduction to computer graphics
		2	03-Nov-20	Basics of Graphics systems
		3	04-Nov-20	CUI and GUI
		4	05-Nov-20	Interactive and non- Interactive graphics
		5	06-Nov-20	Application areas of Computer Graphics
		6	07-Nov-20	video-display devices
	Sunday		08-Nov-20	
<b>2nd week</b>		1	09-Nov-20	Properties of video display device
		2	10-Nov-20	Random scan system
		3	11-Nov-20	Raster scan system
		4	12-Nov-20	CRT Monitor
		5	13-Nov-20	Diwali Vacation
		6	14-Nov-20	
	Sunday		15-Nov-20	
<b>3rd week</b>		1	16-Nov-20	
		2	17-Nov-20	
		3	18-Nov-20	Shadow- mask method
		4	19-Nov-20	DVST and Flat panel display
		5	20-Nov-20	LCD and LED display
		6	21-Nov-20	input devices and output devices
	Sunday		22-Nov-20	
<b>4th week</b>		1	23-Nov-20	Working of display processor
		2	24-Nov-20	Point and lines
		3	25-Nov-20	Program to display a point using graphics in c
		4	26-Nov-20	Pixel, resolution,persistence
		5	27-Nov-20	DDA line drawing algorithms
		6	28-Nov-20	Numerical problem of DDA
	Sunday		29-Nov-20	
<b>5th week</b>			30-Nov-20	Holiday

		1	01-Dec-20	Bresenham's line drawing algorithms
		2	02-Dec-20	Numerical problem of Bresenham's
		3	03-Dec-20	Scan converting a circle
		4	04-Dec-20	Bresenham's circle algorithms
		5	05-Dec-20	Scan converting an ellipse
	Sunday		06-Dec-20	
<b>6th week</b>		1	07-Dec-20	Program to draw a line
		2	08-Dec-20	Region filling
		3	09-Dec-20	Area filling
		4	10-Dec-20	Scan line polygon fill algorithm
		5	11-Dec-20	boundary fill algorithms
		6	12-Dec-20	Flood fill algorithms
	Sunday		13-Dec-20	
<b>7th week</b>				
		1	14-Dec-20	2-D Geometrical Transforms
		2	15-Dec-20	Translation and matrix
		3	16-Dec-20	Scaling and matrix
		4	17-Dec-20	Rotation and matrix
		5	18-Dec-20	shear transformations and matrix
		6	19-Dec-20	homogeneous coordinates system
	Sunday		20-Dec-20	
<b>8th week</b>				
		1	21-Dec-20	matrix representations in transformation
		2	22-Dec-20	composite transforms, transformations
		3	23-Dec-20	Implementation of translation
		4	24-Dec-20	Implementation of Rotation
		5	25-Dec-20	Rotation about origin
		6	26-Dec-20	HOLIDAY
	Sunday		27-Dec-20	
<b>9th week</b>				
		1	28-Dec-20	Rotation about fixed point
		2	29-Dec-20	Scaling with respect to the origin
		3	30-Dec-20	Reflection transformation
		4	31-Dec-20	Mirror reflection about an axis
		1	01-Jan-21	Inverse geometric transformation
		2	02-Jan-21	Composite transformation
	Sunday		03-Jan-21	
<b>10th week</b>		1	04-Jan-21	Numerical problem solve of transformation
		2	05-Jan-21	Numerical problem solve of rotation
		3	06-Jan-21	Numerical problem of scaling, translation
		4	07-Jan-21	2-D Viewing , The viewing pipeline
		5	08-Jan-21	viewing coordinate reference frame
		6	09-Jan-21	Line clipping algorithm
	Sunday		10-Jan-21	
<b>11th week</b>		1	11-Jan-21	COHEN-SUTHERLAND algo
		2	12-Jan-21	Midpoint subdivision algo



		3	13-Jan-21	Polygon clipping
		4	14-Jan-21	SUTHERLAND-HODGMAN algo.
		5	15-Jan-21	Window and viewport system
		6	16-Jan-21	window to viewport coordinate transformation
	Sunday		17-Jan-21	
<b>12th week</b>		1	18-Jan-21	Cyrus-beck line clipping algorithms
		2	19-Jan-21	Numerical solve
		3	20-Jan-21	3-D Object Representation
		4	21-Jan-21	Polygon surfaces
		5	22-Jan-21	quadric surfaces
		6	23-Jan-21	spline representation
	Sunday		24-Jan-21	
<b>13th week</b>		1	25-Jan-21	Hermite curve
		2	26-Jan-21	HOLIDAY
		3	27-Jan-21	Solid modeling
		4	28-Jan-21	Bezier curve
		5	29-Jan-21	B-Spline curves
		6	30-Jan-21	Bezier and B-Spline surfaces
	Sunday		31-Jan-21	
<b>14th week</b>			01-Feb-21	Basic illumination models
		1	02-Feb-21	polygon-rendering methods
		2	03-Feb-21	Hidden surface
		3	04-Feb-21	Depth buffer algo or Z-buffer algo
		4	05-Feb-21	3-D Geometric Transformations
		5	06-Feb-21	3-D Geometrical Transforms
	Sunday		07-Feb-21	
<b>15th week</b>		1	08-Feb-21	Translation and matrix
		2	09-Feb-21	Scaling and matrix
		3	10-Feb-21	Rotation and matrix
		4	11-Feb-21	3-D reflection and shear transformations
		5	12-Feb-21	3-D composite transformations.
		6	13-Feb-21	3-D Viewing, Viewing pipeline
	Sunday		14-Feb-21	
<b>16th week</b>		1	15-Feb-21	
		2	16-Feb-21	HOLIDAY
		3	17-Feb-21	3-D Viewing: viewing coordinates
		4	18-Feb-21	Projection in graphics
		5	19-Feb-21	Types of projection
		6	20-Feb-21	general projection transforms and clipping
	Sunday		21-Feb-21	
<b>17th week</b>		1	22-Feb-21	Numerical problems
		2	23-Feb-21	NUMERICAL PROBLEMS
		3	24-Feb-21	NUMERICAL PROBLEMS
		4	25-Feb-21	NUMERICAL PROBLEMS

		5	26-Feb-21	REVISION
		6	27-Feb-21	REVISION
	Sunday		28-Feb-21	

