

### LESSON PLAN

Name of the Assistant Professor : KIRANPAL SINGH VIRK

Class and Section: B.SC. Computer Science – IV Semester

Subject: PAPER 1 : Object Oriented Programming with C++ (Monday, Tuesday, Wednesday)

PAPER 2: Operating System (Thursday, Friday, Saturday)

WEEK	DATE	TOPICS
1	1-Jan-18	Object-Oriented programming features and benefits
	2-Jan-18	Object-Oriented features of C++
	3-Jan-18	Class and Objects
	4-Jan-18	operating system, architecture,
	5-Jan-18	functions, characteristics, historical evolution
	6-Jan-18	types: Serial batch, multiprogramming
	7-Jan-18	<b>SUNDAY</b>
2	8-Jan-18	Data Hiding & Encapsulation
	9-Jan-18	Structures
	10-Jan-18	Data members and Member functions
	11-Jan-18	types: time sharing, real time,
	12-Jan-18	types: distributed and parallel
	13-Jan-18	OS as resource Manager
	14-Jan-18	<b>SUNDAY</b>
3	15-Jan-18	Scope resolution operator and its Significance
	16-Jan-18	Static Data Members
	17-Jan-18	Static member functions
	18-Jan-18	Computer system structures: I/O structure, storage structure, storage hierarchy
	19-Jan-18	Operating system structure: system components,
	20-Jan-18	Services, system calls
	21-Jan-18	<b>SUNDAY</b>
4	22-Jan-18	<b>VASANT PANCHAMI</b>
	23-Jan-18	Nested and Local Class
	24-Jan-18	<b>SIR CHHOTU RAM JAYANTI</b>
	25-Jan-18	Accessing Members of Class and Structure
	26-Jan-18	<b>REPUBLIC DAY</b>
	27-Jan-18	System programs, system structures
	28-Jan-18	<b>SUNDAY</b>
5	29-Jan-18	PAPER 1 : Assignment I Total class strength will be divided into groups. Each group shall have 3 students(Maximum) Different assignment will be given to each group. Each group has to prepare a power point presentation and submit the same on Google Drive up to 09-Feb-2017)
	30-Jan-18	PAPER 1 : Class Test (Syllabus include all topics of Unit 1)
	31-Jan-18	Constructor, Initialization using constructor

WEEK	DATE	TOPICS
1	1-Feb-18	PAPER 2 : Assignment I Total class strength will be divided into groups. Each group shall have 3 students(Maximum) Different assignment will be given to each group. Each group has to prepare a power point presentation and submit the same on Google Drive up to 12-Feb-2017)
	2-Feb-18	PAPER 2 : Class Test (Syllabus include all topics of Unit 1)
	3-Feb-18	Process management: process concepts, process state
	4-Feb-18	<b>SUNDAY</b>
2	5-Feb-18	types of constructor– Default, Parameterized
	6-Feb-18	types of constructor– Copy Constructors
	7-Feb-18	Constructor overloading, Default Values to Parameters
	8-Feb-18	process control block
	9-Feb-18	Process operations
	10-Feb-18	<b>MAHARSHI DAYANAND SARASWATI JAYANTI</b>
11-Feb-18	<b>SUNDAY</b>	
3	12-Feb-18	Destructors
	13-Feb-18	<b>MAHA SHIVRATRI</b>
	14-Feb-18	Console I/O: Hierarchy of Console Stream Classes, Unformatted and Formatted I/O Operations
	15-Feb-18	process scheduling, inter process communication
	16-Feb-18	CPU Scheduling: scheduling criteria, levels of scheduling,
	17-Feb-18	scheduling algorithms, multiple processor scheduling
	18-Feb-18	<b>SUNDAY</b>
4	19-Feb-18	PAPER 1 : Class Test (Syllabus include all topics of Unit 2)
	20-Feb-18	Manipulators
	21-Feb-18	Friend Function
	22-Feb-18	Deadlocks: Characterization, methods of handling
	23-Feb-18	Deadlock detection
	24-Feb-18	Deadlock prevention, avoidance
	25-Feb-18	<b>SUNDAY</b>
5	26-Feb-18	Friend Class
	27-Feb-18	Friend Function and Friend Class
	28-Feb-18	<b>WINTER BREAK FROM 28.02.2017 TO 04.03.2017</b>

WEEK	DATE	TOPICS
1	1-Mar-18	<b>GURU RAVIDAS BIRTHDAY</b>
	2-Mar-18	<b>HOLI</b>
	3-Mar-18	<b>WINTER VACATION</b>
	4-Mar-18	<b>SUNDAY</b>
2	5-Mar-18	Arrays
	6-Mar-18	Array of Objects
	7-Mar-18	Passing and Returning Objects to Functions, String Handling in C++
	8-Mar-18	deadlock recovery
	9-Mar-18	PAPER 2 : Class Test (Syllabus include all topics of Unit 2)
	10-Mar-18	memory management of single-user and multiuser operating system
	11-Mar-18	<b>SUNDAY</b>
3	12-Mar-18	Pointers, new and delete Operator
	13-Mar-18	Array of Pointers to Objects
	14-Mar-18	this Pointer
	15-Mar-18	partitioning, swapping
	16-Mar-18	paging and segmentation,
	17-Mar-18	virtual memory,
	18-Mar-18	<b>SUNDAY</b>
4	19-Mar-18	Passing Parameters to Functions by Reference & pointers
	20-Mar-18	Passing Parameters to Functions by Reference & pointers
	21-Mar-18	PAPER 1 : Class Test (Syllabus include all topics of Unit 3)
	22-Mar-18	Page replacement Algorithms,
	23-Mar-18	<b>SHAHEEDI DIWAS OF BHAGAT SINGH, RAJGURU &amp; SUKHDEV</b>
	24-Mar-18	Thrashing
	25-Mar-18	<b>SUNDAY/ RAM NAVAMI</b>
5	26-Mar-18	PAPER 1: Assignment 2 Different assignment will be given to each student. Each student has to prepare a 8-10 hand written page assignment, and submit the hand written copy to class teacher and submit scanned copy of the same on Google Drive up to 03-Apr-2017)
	27-Mar-18	Polymorphism and types
	28-Mar-18	Static Polymorphism
	29-Mar-18	Process synchronization, critical section problems
	30-Mar-18	semaphores
	31-Mar-18	Mutual exclusion

WEEK	DATE	TOPICS
1	1-Apr-18	<b>SUNDAY</b>
	2-Apr-18	Operators in C++
	3-Apr-18	Precedence and Associativity Rules
	4-Apr-18	Operator Overloading – Unary Operators
	5-Apr-18	PAPER 2 : Class Test (Syllabus include all topics of Unit 3)
	6-Apr-18	PAPER 2: Assignment 2 Different assignment will be given to each student. Each student has to prepare a 8-10 hand written page assignment, and submit the hand written copy to class teacher and submit scanned copy of the same on Google Drive up to 12-Apr-2017)
	7-Apr-18	Device and file management: Disk scheduling
	8-Apr-18	<b>SUNDAY</b>
2	9-Apr-18	Operator Overloading – Unary Operators
	10-Apr-18	Operator Overloading - Binary Operators
	11-Apr-18	Operator Overloading - Binary Operators
	12-Apr-18	Disk structure, Disk management
	13-Apr-18	File Systems: Functions, File access and allocation methods,
	14-Apr-18	<b>DR AMBEDKAR JAYANTI / VAISAKHI</b>
	15-Apr-18	<b>SUNDAY</b>
3	16-Apr-18	Function Overloading
	17-Apr-18	Inline Functions, Merits/Demerits of Static Polymorphism
	18-Apr-18	<b>PARASHURAMA JAYANTI</b>
	19-Apr-18	File Systems: Functions, File access and allocation methods,
	20-Apr-18	Directory Systems: Structured Organizations
	21-Apr-18	Directory and file protection mechanisms.
	22-Apr-18	<b>SUNDAY</b>
4	23-Apr-18	PAPER 1 : Class Test (Syllabus include all topics of Unit 4)
	24-Apr-18	Queries on Paper 1: Unit 1,2
	25-Apr-18	Queries on Paper 1 : Unit 3,4
	26-Apr-18	PAPER 2 : Class Test (Syllabus include all topics of Unit 4)
	27-Apr-18	Queries on Paper 2: Unit 1,2
	28-Apr-18	Queries on Paper 2 : Unit 3,4