

RAJASTHAN TECHNICAL UNIVERSITY, KOTA

Lecture Plan

Session:	2012-13
Semester:	3 rd Semester
Name of Faculty:	Mrs.Sunita Chahar
Department:	Electrical Engineering Department
Course Name and Number:	
Name of Subject (with code):	(3EE4A) OBJECT ORIENTED PROGRAMMING
Batch Name/Discipline:	Electrical Engineering

Lecture Plan Details		
Lecture No.	Topic to be covered	Remark
L-1	1 Introduction: Review of structures in C, Structures as user defined data types.	
L-2	accessing members of structures using structure variables,	
L-3	pointer to structures,	
L-4	passing structures to functions	
L-5	2 Introduction to Programming Paradigms: (Process oriented and Object oriented).	
L-6	Concept of object, class, objects as variables of class data type,	
L-7	difference in structures and class in terms of access to members,	
L-8	private and public Basics of C++: Structure of C++ programs,	
L-9	introduction to defining member functions within and outside a class,	
L-10	keyword using, declaring class,	
L-11	creating objects	

L-12	constructors & destructor functions,	
L-13	Initializing member values with and without use of constructors,	
L-14	simple programs to access & manipulate data members	
L-15	cin and cout functions.	
L-16	Dangers of returning reference to a private data member,	
L-17	constant objects and members function,	
L-18	composition of classes,	
L-19	friend functions AND	
L-20	classes, using this pointer,	
L-21	friend functions and classes, using this pointer,	
L-22	creating and destroying objects dynamically using new and delete operators.	
L-23	Static class members,	
L-24	container classes and iterators,	
L-25	proxy classes.	
L-26	Members of a class, data & function members.	
L-27	Characteristics of OOP-Data hiding, Encapsulation, data security.	
L-28	3 Operator Overloading:	
L-29	Fundamentals,Restrictions, operator functions as class members v/s as friend functions.	
L-30	Overloading stream function,	

L-31	binary operators and unary operators. Converting between types.	
L-32	4 Inheritance: Base classes and derived classes,	
L-33	protected members, relationship between base class and derived classes,	
L-34	constructors and destructors in derived classes,	
L-35	public, private and protected inheritance Relationship among objects in an inheritance hierarchy,	
L-36	abstract classes, virtual functions and	
L-37	dynamic binding, virtual destructors.	
L-38	5 Multiple inheritance virtual base classes, pointers to classes	
L-39	Class members, multiple class members, template	
L-40	Exception handling	