

Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur

Teaching Plan (Semester-III)

(June - 2018 to Oct-2018)

1. Details of Classes to be taught

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	B. C. A. SY	Suchitra K. Kasbe	Computer Science and IT	U-OOP-390 Object Oriented Programming Using C++	45

2. Summary of Lesson Plan


Sr. No.	Unit and Chapter to be covered	Date	No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic and date
Unit I	UNIT-I: Introduction to Object Oriented Programming 1. Getting Started: Introduction, A brief history of C++, Advantages of OOP - Usage of OOP and C++ Variable, constant, Expression, Statements, Comments and keywords of C++ 2. Operator: Arithmetic, Relational, Logical, Assignment, Increment/Decrement, Conditional, Precedence of Operators. Data type, Type Conversion, library function. 3. Input / Output Statements:	25.06.2018 To 07.07.2018	06	Assignment Questions on Operators Advantages of OOP	
		08.07.2018 To 31.07.2018	07		

	Inputting using cin and outputting using cout statements. Preprocessor directives. Basic program construction.				
Unit II	UNIT-II :Array , control and Looping Statement 4. Decision Making and Looping Statement: If Statement, If..else statement, nesting of if statement, Switch statement, conditional operator statement. While loop, Do loop, For loop, nesting of loops, break and	01.08.2018 To 16.08.2018	05	Program Assignment on Arrays	UNIT TEST I ACTIVITY BASED TEST 14.09.2018 to 30.09.2018
	continue statement, go to statement. 5. Arrays: Defining an array Array type, array elements Accessing and averaging array elements, initializing array. Programming of C++ with array. String handling, array of strings.	18.08.2018 To 31.08.2018	05		
Unit III	UNIT-III : Introduction to Class and Functions 6. Functions: What is a function? Declaring and defining function. Local, global variables, execution of function. Passing argument to function, Return values. Reference arguments. Overloading functions. Inline function and default parameter.	01.09.2018 To 15.09.2018	06	Program Assignment on class and object PPT on class and object	
		17.09.2018 To 25.09.2018	06		

	7. Object Oriented Programming: Objects & Classes. Constructor & Destructor. Operator overloading. Overloading unary operators. Overloading binary operators.				
Unit IV	UNIT IV : Inheritance and Polymorphism 8. Inheritance: Derived class and Base Class. Derived Class Constructors. Overriding member functions. Inheritance in the English distances class, class hierarchies. Public and Private Inheritance. Level of inheritance. 9. Polymorphism: Problems with single inheritance. Multiple inheritances.	26.09.2018 To 29.09.2018 30.09.2018 To 03.10.2018	05 05	PPT on Polymorphism and Inheritance	UNIT TEST II MCQ TEST 07.10.2018 To 22.10.2018


Suchitra K. Kasbe

Name & Signature of Teacher


HoD
Head
Dept. of Computer Science
Rajarshi Shahu Mahavidyalaya, Latur


Principal
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3. Details of Classes to be taught

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	B. Sc. C.S. SY	Suchitra K. Kasbe	Computer	U-OOP-382 Object Oriented Programming Using C++	45

4. Summary of Lesson Plan

Sr. No.	Unit and Chapter to be covered	Date	No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic and date
Unit I	UNIT- I: Introduction to Object Oriented Programming 1. Principles of Object-Oriented Programming (OOP) Evolution of C++ - Programming Paradigms - Key Concepts of OOP - Advantages of OOP - Usage of OOP and C++. Input and Output in C++- Streams- Stream classes Unformatted console I/O operations-	27.06.2018 To 07.07.2018	05	Assignments on basic concepts of OOP and I/O statements	
	Member functions of istream class-manipulators-manipulators with parameters 2. Introduction to C++ Tokens, Keywords, Identifiers, Variables, Operators, Expressions and Control Structures: If,If. Else, Switch – Repetitive Statements- for, while, do..while - Pointers and arrays	09.07.2018 To 20.07.2018	05		

Unit II	UNIT II: Class, Functions and Constructors	23.08.2018 To 28.08.2018	05	Program Assignments	UNIT TEST I ACTIVITY BASED TEST 14.09.2018 to 30.09.2018
	3. Structures and Unions: Declaration of structures, Accessing structure members, 4. Structure Initialization, Arrays of structure, nested structures, structure with pointers, functions & structures, Unions, Structure/Union Versus Class in C++.				
	5. Class Declaration Data Members, Member Functions, Private and Public Members, Data Hiding and Encapsulation, Array within a class.	30.08.2018 To 04.09.2018	06		
	6. Class Function Definition Member Function definition inside the class and outside the class,				
	7. Friend Function, Inline Function, Static Members & Functions, Scope Resolution Operator, Private and Public Member Functions, Nesting of Member Functions. Creating Objects, Accessing class data members, Accessing member functions, Arrays of Objects, Objects as function arguments: Pass by value, Pass by reference, Pointers to Objects.	06.09.2018 To 21.09.2018	12		
	6. Constructors and Destructors Declaration and Definition, Default Constructors, Parameterized Constructors, Constructor Overloading, Copy Constructors. Destructors: Definition and use.				

Unit III	UNIT III: Inheritance and Overloading Inheritance Extending Classes, Concept of inheritance, Base class, Derived class, Defining derived classes, Visibility modes : Private, public, protected; Single inheritance : Privately derived, Publicly derived;	23.09.2018 To 30.09.2018	07	PPT on Inheritance	
	Making a protected member inheritable, Access Control to private and protected members by member functions of a derived class, Multilevel inheritance, Nesting of classes. 8. Function Overloading & Operator Overloading Binary & Unary	31.09.2018 To 07.10.2018	07		
Unit IV	UNIT IV: Polymorphism and file operations Polymorphism Definition, early Binding, Polymorphism with pointers, Virtual Functions, late binding, pure virtual functions.	08.10.2018 To 15.10.2018	05	PPT on polymorphism	UNIT TEST II MCQ TEST 07.10.2018 To 22.10.2018
	Working with files Header file, redirection, Classes for File Stream Operations – Opening and Closing a File - End-of File Detection - file input and output. File Pointers - Updating a File - Error Handling during File Operations - Command-line Arguments, buffers & iostreams	17.10.2018 To 03.11.2018	05		

Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur

Teaching Plan (Semester-II)

(Nov – 2018 to March-2019)

5. Details of Classes to be taught

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	B. Sc. FY	Suchitra K. Kasbe	Computer Science	U-COS-242 Programming in C	45

6. Summary of Lesson Plan

Sr. No.	Unit and Chapter to be covered	Date	No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic and date
Unit I	UNIT- I Basics of C Language and Arrays Control Statements, Looping Statements, Introduction To Array Declaration And Initialization Of Arrays, Accessing Array Elements, Memory Representation Of Array, Arrays And Its Types, String Handling Functions.	29.11.2018 To 15.12.2018	6	PPTs on control and looping statements, Arrays	
		16.12.2018 To 26.12.2018	6		
Unit II	UNIT- II Functions, Structure and Union Introduction, Types of functions, Defining functions, Arguments Function prototype, Calling function, Returning function results Call by value and call by reference, Recursion, Introduction to Structure Declaration of structure, Accessing Structure Elements, How structure elements are stored? , Array of Structure, Introduction to Union, Declaration of Union Accessing Union Elements, How union elements are stored.	31.12.2018 To 08.01.2019	04	Program Assignment on Functions, Structure and Union	UNIT TEST I ACTIVITY BASED TEST
		09.01.2019 To 21.01.2019	05		
		22.01.2019 To 30.01.2019	06		

Unit III	UNIT- III Storage Classes and Pointers Automatic storage class, Register storage class, Static storage class External storage class,	04.02.2019 To 12.02.2021	05	PPTs on storage classes and pointer	
	Introduction to Pointers, Pointer declaration, initialization Dereferencing pointers, Pointer arithmetic, Pointer to pointer, Arrays and pointers.	13.02.2019 To 27.02.2019	05		
Unit IV	UNIT- IV File Management In C Defining and opening a file - closing file I/O operations on files	05.03.2019 To 14.03.2019	06	Assignment on file handling	UNIT TEST II
	Error handling during I/O operations Random access to files Command line arguments	15.03.2019 To 20.03.2019	04		

Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur
Teaching Plan (Semester-VI)
(Nov – 2018 to March-2019)

1. Details of Classes to be taught

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	B. Sc. C.S. TY	Suchitra K. Kasbe	Computer Science and IT	U-COG-689 Computer Graphics	45

2. Summary of Lesson Plan

Sr. No.	Unit and Chapter to be covered	Date	No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic and date
Unit I	Unit- I 1. Introduction to Computer Graphics 1.1 Introduction 1.2 Advantages of computer graphics 1.3 Application of computer graphics 1.4 Co-ordinate system: Cartesian and Polar 1.5 Display devices: Cathode Ray Tubes, Color CRT monitors	29.11.2018 To 09.12.2018	09	PPTs on computer graphics devices and algorithms	
	1.6 Direct View Storage Tube, Plotter, Light pen, Joystick 2. Raster Scan Graphics 2.1 Line segment and line drawing algorithm 2.2 Digital differential Algorithm 2.3 Bresenham's line algorithm	10.12.2018 To 20.12.2018	09		

Unit II	Unit – II 3. Transformation	21.12.2018 To 08.01.2019	09	Assignment on Scaling, Translation and Rotation	UNIT TEST I ACTIVITY BASED
	3.1 Two dimensional transformation 3.2 Matrix representation 3.3 Transformation: Translation, Rotation, Scaling, Reflection, Shear Activity Based Test	09.01.2019 To 21.01.2019			
	4. Segmented Display Files 4.1 Segment table 4.2 4.2 Functions for segmenting display file Posting & unposting segments 4.4 Segment naming scheme 4.5 Default error conditions 4.6 Appending to segments	22.01.2019 To 18.02.2019	10		

Unit III	Unit – III 5. Clipping & Windowing 5.1 Viewing transformation 5.2 2- D clipping 5.3 End point codes 5.4 Midpoint subdivision algorithm, 5.5 Polygon clipping algorithm (Sutherland-Hodgman algorithm) 5.6 Windowing transformation	19.02.2019 To 06.03.2019	08	PPTs on Windowing Transformat ion and clipping algorithm	
	6. Display File Compilations 6.1 Display file compiler 6.2 Refresh concurrent with reconstruction 6.3 Free storage allocation 6.4 Display file structure	07.03.2019 To 16.03.2019	08		

Rajarshi Shahu Mahavidyalaya, (Autonomous), Latur
Teaching Plan (Semester-IV)
(Nov – 2018 to March-2019)

1. Details of Classes to be taught

Sr. No.	Class	Name of Asst. Prof.	Subject	Paper	Total Lecturers:
1	B. Sc. C.S. SY	Suchitra K. Kasbe	Computer Science and IT	U-ADJ-482 Advance Java	45

2. Summary of Lesson Plan


Sr. No.	Unit and Chapter to be covered	Date	No. of Lectures	Academic activities to be organized	No. of Test / Assignment with topic and date
Unit I	Unit I 1. Introduction to AWT: Working with windows, Graphics Text 1.1AWT Classes 1.2WindowsFundamentals 1.3Working with Frame window 1.4Working with Graphics 1.5Working with Colors & Fonts	29.11.2018 To 09.12.2018	09	PPTs on AWT classes	
	2. Swing Components 2.1 Icons & Labels Button & Label, TextField & Buttons 2.2 CheckBoxes, Radio buttons 2.3 Combo Box & Lists 2.4 Scroll panes 2.5 Trees 2.6 Tables 2.7 Menu Bars & Menus	10.12.2018 To 20.12.2018	09		


Unit II	Unit-II 3. Networking 3.1 The java.net package 3.2 Connection oriented transmission – Stream Socket Class 3.3 Creating a Socket to a remote host on a port (creating TCP client and server) 3.4 Simple Socket Program Example 3.5 Programs on chatting 1-1. 4. JDBC 4.1 The design of JDBC 4.2 Basic JDBC Concept 4.3 Drivers 4.4 Making the Connection, Statement 4.5 Executing SQL commands 4.6 Executing queries 4.7 Scrollable and updatable result sets 4.8 Metadata, Transactions Activity Based Test	21.12.2018 To 01.01.2019	10	Programming assignmentson JDBC	UNIT TEST I ACTIVITY BASED TEST
		02.01.2019 To 12.01.2019	10		
Unit III	Unit-III 5. Servlet 5.1 Introduction 5.2 Life cycle of servlet 5.3 Handling HTTP Get Request 5.4 Handling HTTP Post Request 6. Introduction to JSP 6.1 Getting Familiar with JSP Server 6.2 First JSP 6.3 Adding Dynamic contents via expressions 6.4 Scriptlets, Mixing Scriptlets and HTML 6.5 Directives, Declaration, Tags and Session	01.02.2019 To 11.02.2019	08	PPTs on servlet and JSP	
		12.02.2019 To 21.02.2019	09		

Unit IV	Unit-IV 7. Introduction to JavaBeans & Hibernate	22.02.2019 To 07.03.2019	12	Assignment on java bean	UNIT TEST II
	7.1 What is bean 7.2 Advantages 7.3 The bean-writing process 7.4 Introduction to jar and manifest files 7.5 The java beans API 7.6 Overview Of hibernate 7.7 Hibernate Architecture	08.03.2019 To 21.03.2019	12		


 Suchitra K. Kasbe

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