DEPARTMENT OF COMMERCE (SF) DEVA MATHA COLLEGE KURAVILANGAD

Affiliated to Mahatma Gandhi University, Kottayam



REPORT

On

ADD-ON COURSE

DIPLOMA IN COMPUTER APPLICATIONS (DCA)

Academic Year: 2017-18

Add-on Course On DIPLOMA IN COMPUTER APPLICATIONS (DCA)

The Commerce (SF) Department of Deva Matha College, Kuravilangad, in association with Kerala State Rutronix has conducted an Add-on Course in Diploma in Computer Applications (DCA) for the UG students of Deva Matha College Kuavilangad.

11 students registered for the course and successfully completed the course. The duration of the course is one year. The main objective of the course is to covers the basics of computers and makes the students proficient in operating systems, Word processing, spreadsheet, internet operations and programming in the most popular and User friendly Visual Basic, NET, C++ & Java. Certificates from Kerala State Rurtonix will be issued to the eligible students based on their scores in qualifying examination. Students who score a minimum of 40% marks in final theory examination, minimum of 50% marks in the final practical examination and 50% overall average for every subject would be declared successful. Certificates from Deva Matha College, Kuravilangad will be issued to the eligible students based on their scores in qualifying examination Conducted by Department of Commerce (SF) Deva Matha College, Kuravilangad.

Contents

- 1. Syllabus
- 2. Resource Persons
- 3. Brochures
- 4. Feedback on the course
- 5. Attendance sheet
- 6. Examination Mark list
- 7. Sample Certificates
- 8. Conclusion

DETAILS OF THE COURSE:

Name of course : DCA-regular

Qualification : SSLC & ABOVE
Duration : 1 year (260 Hours)

Syllabus of the Course

Objective of the Course:

A twelve months course, which covers the basics of computers and makes you proficient in Operating Systems, Word processing, spreadsheet, Internet operations and programming in the most popular and User friendly Visual Basic, .NET, C++ & Java. After the completion of this course he/she will have become an expert in Microsoft Office package and able to create any Desktop application using development tool- Visual studio. On successful completion of the course, the students get PSC approved Certificate from Kerala State Rutronix or certificate from Deva Matha College, Kuravilangad.

MODULE WISE SYLLABUS

PAPER	SUBJECT	THEORY(Hrs)	PRACTICAL(Hrs)
	Semester I	Theory	Lab
I	Computer fundamentals, internet concepts and OS	30	20
II	Office suit	30	20
III	Java and C++ programming	30	20
	Total	90	60
	Semester II		
IV	System engineering and essentials of VB and	60	30

	VB.net		
V	Project		20
	Total	150	110

Detailed Syllabus

Paper I: Computer fundamentals, Internet concepts and Operating Systems		
Module-I : Computer fundamentals , Internet concepts (Theory:40 hrs. practical :10 hrs)		
Introduction	6	
Computer - Definition, Characteristics etc.		
History of Computers		
Functions of Computer		
Applications of Computer		
Computer Classifications, About clock speed		
Net works of Computers		
Number Systems	6	
Representation of Data, various number systems , arithmetic in various number		
systems		
Bit, Byte, Characters, Field, Record, File		
Computers Languages		
Functional Organization of a Computer	8	
Hardware	Ü	
Input Device		
Output Device		
CPU Achievement		
Memory devices		
Secondary Memory devices		
Software	6	
System Software	O	
•		
Application Software		
Compiler		
Interpreter		
Different operating Systems: Single User, Multi User and Multi Tasking OS		
Virus Affection and diagnosing tools	2	
Types of personal computers	3	
PC, PC/XT, PC/AT, LAP-TOP,		
PALM-TOP, and DESK-TOP Computers		
Minimum H/w and S/w Configuration		
Program Design and logic	4	
Algorithm and flowchart		
Basic Concept of Networking Communication	2	
LAN,MAN, WAN		
Internet concepts	5	10
About Internet, Intranet, Extranet, Hardware & software requirement for internet		
(mention about modem, ISP, Browser etc.)- Types of internet connection and		
Internet & E-Mail		
Module II: Operating Systems		
(Theory:20 hrs Practical:30 hrs)		
Ms-Dos: (Theory 6 hrs. : Practical 10hrs)	6	10
MS-DOS-Loading Operating system-boot sector &booting-boot sequence of dos		
system file-dos prompt-types of dos commands-external & internal-		
CLS,DATE,TIME,VER,VOL,DIR-VARIOUS SWITCHES(/W,/S,/L,/B)-SORTING OF		
DIRECTORY LISTING		
Internal Dos commands continuation-copy con, type, ren , copy (all		
options),del/erase, wild cards, prompt, directory and sub directory- sub directory		
commands-MD,CD,RD,CD.,,CDPRINT ,path		
About files-file naming-types of files & file extensions(Program files, data files, text		
files, system files etc., batch files-special commands in batch file		
-Dos: (Theory 3 hrs.: Practical 5hrs)	3	5
-DOS-Loading Operating system-boot sector &booting-boot sequence of dos		
tem file-dos prompt-types of dos commands-external & internal-		
S,DATE,TIME,VER,VOL,DIR-VARIOUS SWITCHES(/W,/S,/L,/B)-SORTING OF		

D UD D GM C D U U C GM U U C		
DIRECTORY LISTING		
Internal Dos commands continuation-copy con, type, ren , copy (all		
options),del/erase, wild cards, prompt, directory and sub directory- sub directory commands-MD,CD,RD,CD.,CDPRINT ,path		
, · · · ·		
About files-file naming-types of files & file extensions(Program files, data files,		
text files, system files etc., batch files-special commands in batch file		
External Dos commands		
label,mem,chkdsk,tree,deltree,more,diskcopy,diskcomp,format,scandisk,sys,xcop		
y,attrib,fdisk(hard disk partitioning), exe, .com, .bat files.		
Windows: (Theory 4 hrs.:Practical 10 hrs)	4	5
About windows Operating System- different versions in hierarchical order-		
elements of windows screen-desktop-icons-system icons(my computer, my		
document, network neighbor hood, recycle bin)-shortcut icons(program, folder,		
documents etc.),task bar and taskbar components, using mouse		
The start menu - different options, starting a program, elements of a window, My		
computer icon etc., create files & folders, Windows accessories		
More about internet explorer		
Linux: (Theory 3hrs: Practical 4 hrs)	3	5
About Linux operating system- features-differences between other operating		
systems-Linux distributions		
Linux utilities – image viewer, file compression and decompression, sound		
player, movie player, internet browser, drawing utilities etc.		
Linux commands: Linux terminals -		
cp.mv,ls,clear,exit,date,rm,echo,pico,diff,grep,mke2fs,man,mkdir,less,mv,pwd,cd,		
cd,date,free		
Paper II: Office Suite		
Ms-word : About word processing and word processors ,features of Ms-	6	6
word, Ms-word screen ,screen components, tool bars, Menus and Different menu		O
commands –		
File menu-new, open, close, exit		
Page setup, Save, save as, print preview, print		
Edit-Cut-copy-paste, find-replace, undo-redo, go to ,		
Different screen views		
Insert-Inserting picture- clip art, word art, auto shapes, page numbers		
Zoom options, Headers & Footers		
Formatting features-font, size , color, style, effects, alignment options, bullets		
numbering, change case ,paragraph options, columns, line spacing, Page border		
and shading, Drop cap, Back ground, format painter.		
Tools- Autocorrect, spell-check, thesaurus, mail-merge, handling of data files		
Tables-create and draw table, insert and delete rows and columns, split and		
merge cells, Table properties, convert text to table & table to text		
Keyboard shortcuts.		
Using HELP menu		
Ms-Excel: Introduction to spread sheets , features of Ms-excel, Ms-Excel		
Ms-Excel: Introduction to spread sheets , features of Ms-excel, Ms-Excel screen ,screen components, tool bars, Formula bar		
Ms-Excel: Introduction to spread sheets , features of Ms-excel, Ms-Excel		

cut& paste cells, drag and drop, find & replace, formatting cell, text wrap, format painter, auto format, conditional formatting, formulas, functions, auto sum , sorting, filtering, goal seek , auto fill , auto filling functions, charts, pivot table reports, using help menu, Key board short cuts. Ms-Power point: About presentations and creating of a presentation using power point, Slide views, insert, delete, rearrange slides Objects-group, order, Applying animation effects, slide effects, slide transition Presenting slides- slide show, Time setting, Custom Show Printing Slides , Slide show key board shortcuts Introduction to DBMS, Access as a relational DBMS, Tables, Forms ,Queries, Reports, Macros, Modules, Data type, Data Validation, Importing Data, Primary Keys , Field Properties SQL (Structural Query Language) Open Office: familiarization of Writer, Calc and Impress Paper III : C++ and Java programming Module I- C++ (Theory 15 hrs.: Practical 15 hrs) Principles of Object-Oriented Programming- Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Operators in C++Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as
sorting, filtering, goal seek , auto fill , auto filling functions, charts, pivot table reports, using help menu, Key board short cuts. Ms-Power point: About presentations and creating of a presentation using power point, Slide views, insert, delete, rearrange slides Objects-group, order , Applying animation effects, slide effects, slide transition Presenting slides- slide show, Time setting, Custom Show Printing Slides , Slide show key board shortcuts Introduction to DBMS, Access as a relational DBMS, Tables, Forms ,Queries, Reports, Macros ,Modules, Data type, Data Validation, Importing Data, Primary Keys , Field Properties SQL (Structural Query Language) Open Office: familiarization of Writer, Calc and Impress Paper III : C++ and Java programming Module I- C++ (Theory 15 hrs.: Practical 15 hrs.) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors,
reports, using help menu, Key board short cuts. Ms-Power point: About presentations and creating of a presentation using power point; Slide views, insert, delete, rearrange slides Objects-group, order, Applying animation effects, slide effects, slide transition Presenting slides - slide show, Time setting, Custom Show Printing Slides - slide show key board shortcuts Introduction to DBMS, Access as a relational DBMS, Tables, Forms ,Queries, Reports, Macros, Modules, Data type, Data Validation, Importing Data, Primary Keys , Field Properties SQL (Structural Query Language) Open Office: familiarization of Writer, Calc and Impress Paper III: C++ and Java programming Module I- C++ (Theory 15 hrs::Practical 15 hrs.) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Pynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors, Dynamic Initialization of Objects, Copy Constructors, Dynamic I
Ms-Power point: About presentations and creating of a presentation using power point, Slide views, insert, delete, rearrange slides Objects-group, order, Applying animation effects, slide effects, slide transition Presenting Slides - Slide show, Time setting, Custom Show Printing Slides - Slide show key board shortcuts Introduction to DBMS, Access as a relational DBMS, Tables, Forms ,Queries ,Reports, Macros, Modules, Data type, Data Validation, Importing Data, Primary Keys , Field Properties SQL (Structural Query Language) Open Office: familiarization of Writer, Calc and Impress Paper III: C++ and Java programming Module 1- C++ (Theory 15 hrs: Practical 15 hrs) Principles of Object-Oriented Programming: Object-Oriented Programming Banadigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Ms-Power point: About presentations and creating of a presentation using power point, Slide views, insert, delete, rearrange slides Objects-group, order, Applying animation effects, slide effects, slide transition Presenting Slides - Slide show, Time setting, Custom Show Printing Slides - Slide show key board shortcuts Introduction to DBMS, Access as a relational DBMS, Tables, Forms ,Queries ,Reports, Macros, Modules, Data type, Data Validation, Importing Data, Primary Keys , Field Properties SQL (Structural Query Language) Open Office: familiarization of Writer, Calc and Impress Paper III: C++ and Java programming Module 1- C++ (Theory 15 hrs: Practical 15 hrs) Principles of Object-Oriented Programming: Object-Oriented Programming Banadigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
power point, Slide views, insert, delete, rearrange slides Objects-group, order, Applying animation effects, slide effects, slide transition Presenting slides- slide show, Time setting, Custom Show Printing Slides , Slide show key board shortcuts Introduction to DBMS, Access as a relational DBMS, Tables, Forms , Queries , Reports, Macros , Modules, Data type, Data Validation, Importing Data, Primary Keys , Field Properties SQL (Structural Query Language) Open Office: familiarization of Writer, Calc and Impress Paper III : C++ and Java programming Module I- C++ (Theory 15 hrs.: Practical 15 hrs) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
insert, delete, rearrange slides Objects-group, order , Applying animation effects, slide effects, slide transition Presenting slides - slide show, Time setting, Custom Show Printing Slides - slide show key board shortcuts Introduction to DBMS, Access as a relational DBMS, Tables, Forms ,Queries ,Reports, Macros ,Modules, Data type, Data Validation, Importing Data, Primary Keys , Field Properties SQL (Structural Query Language) Open Office: familiarization of Writer, Calc and Impress Paper III : C++ and Java programming Module I- C++ (Theory 15 hrs: Practical 15 hrs) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Objects-group, order , Applying animation effects, slide effects, slide transition Presenting slides - slide show, Time setting, Custom Show Printing Slides - slide show key board shortcuts Introduction to DBMS, Access as a relational DBMS, Tables, Forms ,Queries ,Reports, Macros ,Modules, Data type, Data Validation, Importing Data, Primary Keys , Field Properties SQL (Structural Query Language) Open Office: familiarization of Writer, Calc and Impress Paper III : C++ and Java programming Module I- C++ (Theory 15 hrs.: Practical 15 hrs.) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Applying animation effects, slide effects, slide transition Presenting slides-slide show, Time setting, Custom Show Printing Slides ., Slide show key board shortcuts Introduction to DBMS, Access as a relational DBMS, Tables, Forms ,Queries ,Reports, Macros ,Modules, Data type, Data Validation, Importing Data, Primary Keys , Field Properties SQL (Structural Query Language) Open Office: familiarization of Writer, Calc and Impress Paper III : C++ and Java programming Module I- C++ (Theory 15 hrs.: Practical 15 hrs.) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Presenting slides - slide show, Time setting, Custom Show Printing Slides - Slide show key board shortcuts Introduction to DBMS, Access as a relational DBMS, Tables, Forms ,Queries ,Reports, Macros ,Modules, Data type, Data Validation, Importing Data, Primary Keys , Field Properties SQL (Structural Query Language) Open Office: familiarization of Writer, Calc and Impress Paper III : C++ and Java programming Module I- C++ (Theory 15 hrs.: Practical 15 hrs.) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Printing Slides ,Slide show key board shortcuts Introduction to DBMS, Access as a relational DBMS, Tables, Forms ,Queries ,Reports, Macros ,Modules, Data type, Data Validation, Importing Data, Primary Keys , Field Properties SQL (Structural Query Language) Open Office: familiarization of Writer, Calc and Impress Paper III: C++ and Java programming Module I- C++ (Theory 15 hrs: Practical 15 hrs.) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructors.
Introduction to DBMS, Access as a relational DBMS, Tables, Forms ,Queries ,Reports, Macros ,Modules, Data type, Data Validation, Importing Data, Primary Keys , Field Properties SQL (Structural Query Language) Open Office: familiarization of Writer, Calc and Impress Paper III : C++ and Java programming Module I- C++ (Theory 15 hrs.: Practical 15 hrs.) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Reports, Macros ,Modules, Data type, Data Validation, Importing Data, Primary Keys , Field Properties SQL (Structural Query Language) Open Office: familiarization of Writer, Calc and Impress Paper III: C++ and Java programming Module I- C++ (Theory 15 hrs.: Practical 15 hrs.) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Open Office: familiarization of Writer, Calc and Impress Paper III: C++ and Java programming Module I- C++ (Theory 15 hrs.: Practical 15 hrs.) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Open Office: familiarization of Writer, Calc and Impress Paper III: C++ and Java programming Module I- C++ (Theory 15 hrs.: Practical 15 hrs.) Principles of Object-Oriented Programming: - Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Module I- C++ (Theory 15 hrs.: Practical 15 hrs.) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Module I- C++ (Theory 15 hrs.: Practical 15 hrs) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Module I- C++ (Theory 15 hrs.: Practical 15 hrs) Principles of Object-Oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Principles of Object-Oriented Programming: - Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Object-Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Programming, Benefits of OOPS, Applications of OOP C++ Statements, Structure of C++ Program Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Tokens, Expression and Control Structures. Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Introduction, Tokens, Keywords, Identifiers and Constants, Basic Data Types, User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
User- Defined Data Types, Derived Data Types, Symbolic Constants, Type Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Compatibility, Declaration of Variables, Dynamic Initialization of Variables, Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Reference Variables, Operators in C++,Scope Resolution Operator, Member Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Dereferencing Operators, Memory Management Operators, Manipulators, Type Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Cast Operator, Expressions and their Types, Special Assignment Expressions, Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Implicit Conversions, Operator Overloading, Operator Precedence, Control Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Structures, Structures, Functions, Arrays, Strings, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Inline, Nesting of Member Functions, Private Member Function, Array within a class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
class, Memory allocation for objects, Static Data Member, Static Member Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Functions, Array of Objects, Object as function arguments. Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Constructor and Destructors Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Introduction, constructors, parameterized Constructors, Multiple constructors with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
with Default Arguments, Dynamic Initialization of Objects, Copy Constructors, Dynamic Constructors and Destructor.
Dynamic Constructors and Destructor.
Functions in C++
The main Function, Function Prototyping, call by reference, Return by Reference,
Inline Functions, Default Argument, Const. Arguments, Function Overloading,
Friend and Virtual Function, Operator Overloading, Recursion.
Inheritance: - Extending Classes Introduction, Defining Derived Classes, Single
Inheritance, Making a Private Member. Inheritance, Multiple Inheritances,
Multilevel Inheritance, Hierarchical Inheritance, Hybrid Inheritance. Pointers,
Virtual Functions and Polymorphism Compile time Polymorphism, run time

Polymorphism, Pointers to Objects, This Pointer, Pointers to Derived Classes, Virtual Functions and Pure Virtual Functions.

Pointers, Virtual Functions and Polymorphism

Introduction, Pointers, Pointers to Objects, This Pointer, Pointers to Derived Classed

Managing Console I/O Operations

C++ Streams, C++ Stream Classes

Working With files

Classes for File Stream Operations, Opening and Closing a file, Detecting end –offile, More about Open (): File Modes, File Pointers and Their Manipulations, Sequential Input and Output Operations, Updating a File: Random Access

Exception Handling

Basics of Exception handling, Exception Handling Mechanism, Throwing mechanism, Catching mechanism, Rethrowing an Exception

Module II- Java (Theory 15 hrs.: Practical 15 hrs.)

Java Evolution –Java history- Java features- compiled an interpreted ,platform independent and portable , object oriented, robust and secure, distributed , simple, small, and familiar , multithreaded and interactive, high performance, dynamic and extensible – How Java differs from C++ - Java and Internet-Java and world Wide Web – Hardware and software soft ware requirements-Java support systems –Java Environment- Java development kit , application programming Interface

Overview of Java language- Simple Java program-class declaration, opening brace, the main line ,the output line – Use of math functions- comments –An application with two classes-Java program structure- documentation section, package statement, import statements, Interface statements, Class definitions ,main method class-Java tokens- Java character set, Keywords, Identifiers , Literals ,operators ,separators-Java statements-Implementing a Java program-creating the program, compiling the program, running the program – Java virtual machine –Command line arguments-programming style

Constants, Variables and Data Types:

Constants- integer constant ,real constants, single character constants, string constants, backslash character constants- Variables-Data types-Integer types, floating point types, character type ,Boolean type – Declaration of variables-giving values to variables-assignment statement, read statement-Scope of variables-Symbolic constants-Type casting-automatic conversion-getting values to variables-Standard default values.

Operators and Expressions: Arithmetic operators: Integer arithmetic, real arithmetic, Mixed –mode arithmetic-Real operators, Logical Operators-

Assignment operators-Increment and decrement operators-Conditional operator-bitwise operators-special operators-instance of operator, dot operator – Arithmetic expressions-Evaluation of expressions-precedence of arithmetic operators-type conversion expressions-automatic type conversion, casting a value-Operator precedence and associativity -Mathematical functions

Decision making and branching : Decision making with if statement, simple if statement, simple if statement, the if -else statement-nesting of if-else statements-the else if ladder-the switch statement, the ?:operator

Decision making and looping: the while statement, the do statement, the for statement- additional features of for loop-nesting of for loops-Nesting of for loops-jumping out of a loop, skipping out of a loop. Labeled loops

Classes, Objects and methods: defining a class- adding variables-adding methods-creating objects-accessing class members- constructors, methods overloading-static members-nesting of methods-inheritance-extending a class-defining subclass-subclass constructor, multilevel inheritance, hierarchical inheritance- Overriding methods-final variables and methods-abstract methods and classes- visibility control- public access-friendly access- protected access-private access- private protected access-rules of thumb

Arrays ,Strings and Vectors: arrays – one dimensional arrays- creating an array- declaration of arrays ,creation of arrays, initialization of arrays, array length- Two dimensional arrays – variable size arrays- strings- string arrays, string methods, string buffer class- Vectors

Interfaces: Multiple Inheritance –defining interfaces-extending interfaces-implementing interfaces-Accessing interface variables

Packages: Putting classes together- Java API packages- using system packagesnaming conventions-creating packages accessing a package- using a packageadding a class to a package –hiding classes

Multithreaded programming : crating threads-extending the thread class-declaring the class- implementing the run() method, starting new thread – Stopping and blocking a thread – stopping a thread, blocking a thread-life cycle of a thread-newborn state, runnable state, running state, blocked state ,dead state – Using thread methods-Thread exceptions-thread priority ,Synchronization-implementing the runnable interface

Managing errors and exceptions: types of error- compile time errors, runtime errors - exceptions-syntax of exception handling code-multiple Catch

statements-Using finally statement- Throwing our own exceptions-using exceptions for debugging Applet programming: Local and remote applets-how applets differ from applications-preparing to write applets, building applet code-Applet Life Cycleinitialization state, running state, Idle or stopped state, dead state, display state-Creating an executable applet- designing a web page- comment section ,head section, body section- Applet Tag- Adding applet to HTML file -running the applet-more about applet tags-passing parameter to applets-aligning the display-more about HTML tags-displaying numerical values-getting input from the user and program analysis. Graphics programming: The graphics class- lines and rectangles-circles and ellipses-drawing arcs-line graphs-using control loops in applets-drawing bar charts. Managing input-output files in Java: concept of streams-stream class-byte stream class -input stream classes, output stream classes- Character stream classes -reader stream classes, writer stream classes - Using streams -other useful I/O classes, using the file class, Input/output exceptions -creation of files-Reading /writing characters, reading/writing bytes-handling primitive data types- concatenating and buffering files. – random access files- interactive input and output- simple Input and output - other stream classes - object streams ,piped streams, pushback streams filtered streams. **Networking**: Socket programming- server socket(TCP/IP)-client socket (TCP/IP)-server sending message to client-Echo-server and client-datagram packet .datagram socket-UDP server -client conversation- URL - URL class -URL connection -JDBC and ODBC- Types of Drivers-Java SQL package-using JDBC-Driver Manager-creating connection-connection interface-creating statements-Statement interface-executing statements-prepared statement interface-Callable statement interface -ResultSet interface Paper IV: System engineering and essentials of VB and VB.net Module I: System Engineering: Introduction to System Engineering-System Definition and concepts: General Theory systems, Manual and automated systems, Real-life Business Sub-Systems. System Environments and Boundaries. Real time and distributed systems. Basic principles of successful systems. Approach to system development: Structured System Analysis and Design, Prototype, Joint

Application Development

Systems documentation consideration: Principles of SystemsDocumentation, Types of documentation and their importance, Enforcing documentation discipline in an organization

System Planning: Data and fact gathering techniques: Interviews, Group Communication, Questionnaires, Presentations & Site Visits. Assessing Project Feasibility: Technical, Operational, Economic, Cost Benefits Analysis, Schedule, legal and contractual, Political. Modem Methods for determining system requirements: Joint Application, Development Program, Prototyping, Business Process Re-engineering. System Selection Plan and Proposal-Post implementation

Modular and Structured Design: Module specifications. Top-down and bottom-up design. Module coupling and cohesion. Structure Charts

Input/Out put: Classification of forms, Input/output forms design. User-interface design, Graphical interfaces. Standards and guidelines for GUI design. Designing Physical Files and Databases: Designing Fields, Designing Physical Records, Designing Physical Files, Designing Databases. Introduction to CASE Tools, Features, Advantages and Limitations of CASE Tools, Awareness about some commercial CASE Tools.

System Implementation and Maintenance:

Planning considerations. Conversion methods, procedures and controls. System acceptance criteria. System Evaluation and Performance. Testing and Validation. Preparing User Manual. Maintenance Activities and Issues

Introduction to Management Information System (MIS):

Meaning and role of MIS-Systems approach to MIS-

Types of information systems: Transaction Processing System, Management Information System, Decision Support System, Expert System Case Studies (Illustrative): MIS for Accounting and Finance Function, MIS for Marketing System.

Module II: VB and VB.net

VB

Introduction to Integrated Development Environment: Elements of VB IDE: Menu bar, Toolbar, Project explorer, Toolbox, Properties window, Form designer, Form layout, Immediate, Locals and Watch window, Edit, View, Run, Debug, Object Browser.

Managing Projects: Concepts of VB projects-Creating the Project, Opening, Renaming and Saving the projects, Elements of user interface, Designing the User Interface, Creating forms and code modules, Aligning the controls.

Managing Projects: Visual development and event-driven programming Common properties, Methods, Common events.-Customizing the environment Editor tabs, Format tab, General tab, Docking tab, Environment tab.

Visual Basic Programming Elements: Variables, Declaring variables, Data Types, Converting variables types, User defined data types, Forcing variables declarations, Scope of variables, Lifetime of a variable -Constants

Collection objects, Arrays: Declaring Arrays, Sorting Arrays, Control Arrays, And Dynamic Arrays.

Procedures: Sub procedures, Function procedure, Control Structure: Control flow Statements, Looping Statements and iteration, Conditional Statements.

The Input/Output: Input Box, Output Box, Form Printing methods.

Working with Forms: The appearance of forms, Form properties, Events, Methods, Controlling one form within another

Basic ActiveX Controls:

The Textbox control, Basic properties, Manipulating the control's text, Text selection, Search and replace operations, Capturing keystrokes.

List Box and Combo Box Controls:

Basic properties, List box control's method, Arrows, Indexing with the List Box control, Searching a sorted list.

Scrollbar and Slider controls:

Scrollbar control, Scrollbar control's event, Timer Control.

Graphics with Visual Basic: Form

- Picture Box
- Image Box controls
- Setting picture and image properties
- Exchange image through the clipboard
- Coordinate systems Scale properties and methods.

The Drawing Methods:

Drawing text, Drawing lines, Drawing boxes, Circle Method, Drawing Modes, Drawing Curves, Manipulating pixels, Specifying colours, Specifying gradients, Using the Paint-Picture method, Processing images, Optimizing issues: refresh, Transparent Drawings.

Manipulating Text:

Working with files-file storing concept-record -field-I/O-types of files-opening and closing of files

Database applications

VB.Net

Introduction-. An overview of . NET frame work

Variables and operators

Control structures

All windows forms

Common Controls: Button-Check Box-Checked List Box-Color Dialog-Combo Box-Date Time Picker-Label-Link Label-List Box-List View-Masked Text Box-Month Calendar-Notify Icon-Numeric Up Down-Picture Box-Progress Bar-Radio Button-Rich Text Box-Text Box-Tool Tip-Tree View-Web Browser

Containers: Flow Layout Panel-Group Box-Panel-Split Control-Table Layout Panel

Menu & Toolbars: Context Menu Strip-Menu Strip-Status Strip-Tool Strip-Tool Strip **Data:** Data Set-Data Grid View-Binding Source-Binding Navigator-Report Viewer

Components

Printing

Dialogs: Color Dialog-Folder Browser Dialog-Font Dialog-Open File Dialog

Save File Dialog

Crystal Reports: Crystal Report Viewer-Report Document

Built tin functions, Sub Procedures &user defined functions: String functions-

Compare, Concat, Join, Insert, Remove, Replace, ToUpper, ToLower, Format, Trim, TrimStart, TrimEnd, PadLeft, PadRight

Math Functions- Math.Ceiling, Math.Exp, Math.Log10, Math.Max, Math.Min, Math.Floor, Math.Round

Validity Functions- isNumeric, isDate, isCurrency, isAlpha

Sub Procedures

Functions

Parameters

User control: User Control Basic-Creating User Control

Class and modules: OOP Basic-Class Declaration-Class Members- Fields, Properties, Methods, Events-Declaration type- Public, Private, Protected, Friend, Protected Friend-Object Creation

Working with ADO.net: Evolution of ADO.NET-Why ADO.NET?-The ADO.NET Data Architecture-Data Set-Data Provider-Data access with ADO.NET-The Connection Object-The Command Object-The Data Reader Object-The Data Adapter Object

Project:

Course Outcome:

After studying this course, the students will be able to:

- Understand the basic concept of computer, OS/GUI, Windows
- Understand the practical concepts of Ms Excel, MS Word, MS Power point, and MSAccess.
- Understand the programming concepts and apply it practically.

Mode of Evaluation:

Attendance, final theory examination and final practical examination

Resource Persons

Mr. Prince Sebastian
Assistant Professor
Commerce (SF)
Deva Matha College
Kuravilangad

Mr. Vince Sebastian
Assistant Professor
Commerce (SF)
Deva Matha College
Kuravilangad

Kuravilangad

BROCHURE

DEVA MATHA COLLEGE KURAVILANGAD DEPARTMENT OF COMMERCE (SF)



in association with

KERALA STATE RUTRONIX

DIPLOMA IN COMPUTER APPLICATIONS (DCA)

Duration: 1 Year

Time: 09am-5pm(Saturdays)

Venue: Commerce Computer Lab

Resource Persons



Mr.Vince Sebastian
M.Com, DCFA
Assistant Professor
Commerce (SF)
Deva Matha College Kuravilangad Kottayam



Mr.Prince Sebastian

Msc. Computer Science DCFA

Deva Matha College Kuravilangad Kottayam

SI. No	ID. No	Temporary ID	Name	Image	Course	Reg. Fee	Challan No.	Status	Action
55	B17K30E055		JAISY JOSEPH Mob: 9961617352 Land Ph: App. No: 44867		PDCFA	1180	B17K0300002	Registered	
56	B17K30E056		GINIMOL GEORGE Mob: 9744224681 Land Ph: App. No: 44868		PDCFA	1180	B17K0300002	Registered	
57	B17K30E057		NEETHUMOL MATHEW Mob: 9946589865 Land Ph: App. No: 44601		PDCFA	1180	B17K0300002	Registered	
58	B17K30E058		P J JYOLSNA Mob: 9562160844 Land Ph: App. No: 44642		PDCFA	1180	B17K0300002	Registered	
59	B17K30E059		JIBIN JOY Mob: 9496616438 Land Ph: App. No: 44849		PDCFA	1180	B17K0300002	Registered	
60	B17K30E060		BIBIN JOY Mob: 9539246957 Land Ph: App. No: 44847		PDCFA	1180	B17K0300002	Registered	
61	B17K30E061		RUGMA B C Mob: 9495363001 Land Ph: App. No: 44848		PDCFA	1180	B17K0300002	Registered	
62	B17K30G001		GANGA P Mob: 8547224597 Land Ph: App. No: 44645		DCA	1416	B17K0300002	Registered	
63	B17K30G002		ATHIRA RAJEEV Mob: 9544173793 Land Ph: App. No: 44646		DCA	1416	B17K0300002	Registered	
64	B17K30E062		SANDRA SANTHOSH Mob: 9745483287 Land Ph: App. No: 44656		PDCFA	1180	B17K0300002	Registered	
65	B17K30G003		APARNA K. REJI Mob: 9961069168 Land Ph: App. No: 44649		DCA	1416	B17K0300002	Registered	
66	B17K30G004		RESHMA		DCA	1416	B17K0300002	Registered	

SI. No	ID. No	Temporary ID	Name	lmage	Course	Reg. Fee	Challan No.	Status	Action
			PRAKASH Mob: 9495363001 Land Ph: App. No: 44650						
67	B17K30E063		MARIYAMOL VARGHESE Mob: 9496898796 Land Ph: App. No: 44869		PDCFA	1180	B17K0300002	Registered	
68	B17K30G005		AGNES GEORGE Mob: 9495363001 Land Ph: App. No: 44651		DCA	1416	B17K0300002	Registered	
69	B17K30E064		BISMI BABU Mob: 9747981785 Land Ph: App. No: 44657		PDCFA	1180	B17K0300002	Registered	
70	B17K30E065		ARCHANA SURESH Mob: 7034833510 Land Ph: App. No: 44643		PDCFA	1180	B17K0300002	Registered	
71	B17K30G006		ATHUL BRUNO BABU Mob: 9526177781 Land Ph: App. No: 44652		DCA	1416	B17K0300002	Registered	
72	B17K30G007		ANJALY R Mob: 9447850431 Land Ph: App. No: 44653		DCA	1416	B17K0300002	Registered	
73	B17K30E066		ATHIRA SUKUMARAN Mob: 9605492152 Land Ph: App. No: 44644		PDCFA	1180	B17K0300002	Registered	
74	B17K30G008		JEEVAN VARGHESE Mob: 9946610277 Land Ph: App. No: 44654		DCA	1416	B17K0300002	Registered	
75	B17K30G009		SREELAKSHMI PRASANNAN Mob: 9495363001 Land Ph: App. No: 44655		DCA	1416	B17K0300002	Registered	
76	B17K30E067		SALINI KANNAN Mob :		PDCFA	1180	B17K0300002	Registered	

SI. No	ID. No	Temporary D	Name	lmage	Course	Reg. Fee	Challan No.	Status	Action
			8593074267 Land Ph: App. No: 44857						
77	B17K30G010		NEETHU NARAYANAN Mob: 7559079478 Land Ph: App. No: 44858		DCA	1416	B17K0300002	Registered	
78	B17K30G011		REMYA C H Mob: 9497667937 Land Ph: App. No: 44859		DCA	1416	B17K0300002	Registered	
79	B17K30E068		BIBIN THOMAS Mob: 9633715124 Land Ph: App. No: 44860		PDCFA	1180	B17K0300003	Registered	
80			SONIYA MOHITE Mob: 8943925758 Land Ph: App. No: 44647		PDCFA	1180	B17K0300004	Pending	

STUDENTS LIST

Sl.No	Class No. / Admission No	Name of the Student	Department
	42162	Athira Rajeev	1DC Zoology
3	42150	Reshma Prakash	I DC Physics
4	42301	Agnes George	I DC Chemistry
5	41792	Athul Bruno Babu	II DC Botany
6	42153	Anjaly R	I DC Physics
7	41740	Jeevan Varghese	II DC Botany
8	41883	Sreelakshmi Prasannan	II DC Physics
9	42003	Neethu Narayanan	II DC Physics
10	41793	Remya C H	II DC Physics
11	42167	Ganga P	I DC Chemistry

Feedback Form

S.NO	Name	1. How would you rate this Add-on Programme as a whole?	2. Rate the Course Design of this Add-on programme.	3. How do you rate the coordination of the course by the Department of Commerce (SF)?	4. How would you rate your overall experience with Addon Classes?
1	Athira Rajeev	Excellent	Excellent	Excellent	Exceeded expectations
2	Aparna K Reji	Good	Good	Good	Met expectations
3	Reshma Prakash	Good	Good	Good	Met expectations
4	Agnes George	Good	Average	Good	Met expectations
5	Athul Bruno Babu	Good	Good	Good	Met expectations

DEVA MATHA COLLEGE, KURAVILANGAD

6	Anjaly R	Good	Excellent	Excellent	Exceeded expectations
7	Jeevan Varghese	Excellent	Excellent	Excellent	Exceeded expectations
8	Sreelakshmi Prasannan	Excellent	Excellent	Excellent	Exceeded expectations
9	Neethu Narayanan	Excellent	Excellent	Excellent	Exceeded expectations
10	Remya C H	Excellent	Excellent	Excellent	Exceeded expectations
11	Ganga P	Excellent	Excellent	Excellent	Exceeded expectations

6 Anjaly R 7 Jeevan Varghese 8 Sreclakshmi Prasannan 9 Neethu Narayanan 10 Remya CH 11 Ganga P	S.No Name of Candidate 1 Athira Rajeev 2 Aparna K Reji 3 Reshma Prakash 4 Agnes George 5 Athul Renna Bak.	5.No Name of Candidate 1 Athira Rajeev 2 Aparna K Reji 3 Roshma Prakash 4 Agnes George 5 Athul Bruno Babu 6 Anjaly R 7 Jeovan Varghese 8 Sreelakshmi Prasennan 9 Neethu Narayanan 10 Remya C H 11 Ganga P
	Service future retificate 25/11/200 00/12/2008 18.	Oligical and University and order of the control of





ATTENDANCE SHEET - DCA 2017-18

Mark List

SI. No	Name	Course	Theory (200)	Practical (200)	% of Marks	Grade
1	Athira Rajeev	DCA	144	152	74	А
2	Aparna K Reji	DCA	128	148	69	В
3	Reshma Prakash	DCA	152	156	77	А
4	Agnes George	DCA	136	140	69	В
5	Athul Bruno Babu	DCA	152	156	77	А
6	Anjaly R	DCA	132	142	69	В
7	Jeevan Varghese	DCA	132	140	68	В
8	Sreelakshmi Prasannan	DCA	140	148	72	А
9	Neethu Narayanan	DCA	156	160	79	А
10	Remya C H	DCA	148	152	75	А
11	Ganga P	DCA	148	164	78	А



Re-Accredited by NAAC With 'A' Grade



Certificate of Merit

This Certificate is awarded to

Jeevan Varghese, IIIrd B.Sc. Botany

for successfully completing Add-on Course,

Diploma in Computer Application

conducted in association with Kerala State Rutronix during

the academic year 2017-18 and securing A Grade

General Co-ordinator

Department Co-ordinator

Principal

Place: Kuravilangad

Date: 29/05/2018

Conducted by

Department of Commerce (SF

Deva Matha College, Kuravilang

Kuravilangad P.O., Kottayam District, Kerala, India Pin Phone: 04822-230233, 232951 | Email: principaldmck@gmail.com, principal@devamatha.ac.in

Website:www.devamatha.ac.in

Grade: A+: >=80, A: >=70 to <80, B: >=60 to <70, C: >=50 to <60, D: >=40 to <50

Conclusion

The course successfully provided the knowledge of basics of computer, MS Office and detailed study of operating system, spreadsheet, internet operations, and programming. It empowered the students to become experts in Programming languages, Microsoft Office package and able to create Desktop application using development tool-Visual studio. Feedbacks were collected from students. PSC approved certificates were distributed to the eligible students based on their scores in qualifying examination conducted by Kerala State Rutronix and certificates from Deva Matha College Kuravilangad were issued to other registered students as per the mode of evaluation including attendance and examination

. Mr. Lenin Joy Department Coordinator

Department of Commerce (SF)



Principal
Deva Matha College
Kuravilangad - 686 633