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: 2018-19



KERALA STATE RUTRONIX

Kerala State Rural Women's Electronics Industrial Co-operative Federation Limited.

A joint venture of Department of Information Technology (Sovt. of India).

Khadi & Vilage Industries Commission (Govt. of India) and Khadi & Vilage Industries Spand (Govt. of Kerala).

Certificate Of Affiliation

This is to certify that

M/S DEVAMATHA COLLEGE. KURAVILANGAD, KOTTAYAM

Co-operative Federation Limited as an Authorised Training Centre with effect from O1-Apr-2018 to 31-Mar-2019 with ATC Code K-030 for conducting training courses under the "Employment Oriented IT Education at Affordable Cost to Ail" programme launched as part of the Golden Jubilee Celebrations of the State.







Thiruvananthapuram 08-Jun-2018 Managing Director

Add-on Course

in

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.

10 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. Photos
- 9. 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.

MODULE WISE SYLLABUS

PAPER	SUBJECT	THEORY(Hrs)	PRACTICAL(Hrs)
	Semester I	Theory	Lab
I	Computer fundamentals, internet concepts and OS	30	20
Ш	Office suit	30	20
III	Java and C++ programming	30	20
	Total	90	60
	Semester II		
IV	System engineering and essentials of VB and VB.net	60	30
V	Project		20
	Total	150	110

Detailed Syllabus

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		
Input Device		
Output Device		
CPU Achievement		
Memory devices		
Secondary Memory devices		
Software	6	
System Software		
Application Software		
Compiler		
Interpreter		
Different operating Systems: Single User, Multi User and Multi Tasking OS		
Virus Affection and diagnosing tools		
Types of personal computers	3	
PC, PC/XT, PC/AT, LAP-TOP,	3	
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	,	10
(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	0	10
, , , , , , , , , , , , , , , , , , , ,		
CLS,DATE,TIME,VER,VOL,DIR-VARIOUS SWITCHES(/W,/S,/L,/B)-SORTING OF DIRECTORY LISTING		
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		

Mc Docs /Theory 2 hrs (Dractical Ehrs)	3	5
Ms-Dos: (Theory 3 hrs. : Practical 5hrs)	3	5
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		
External Dos commands		
label,mem,chkdsk,tree,deltree,more,diskcopy,diskcomp,format,scandisk,sys,xcopy,a		
ttrib,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		3
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-word, Ms-	6	6
word screen ,screen components, tool bars, Menus and Different menu 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.		

Ms-Excel: Introduction to spread sheets , features of Ms-excel, Ms-Excel screen ,screen components, tool bars, Formula bar Work book & work sheets, cells, range, data types & entering data, insert rows & columns, resizing rows and columns, selecting cells, moving and copying cells, 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 ,	Heing HELD monu		
screen components, tool bars, Formula bar Work book & work sheets, cells, range, data types & entering data, insert rows & columns, resizing rows and columns, selecting cells, moving and copying cells, 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, 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 Inline, Nesting of Member Functions, Private Member Function, Array within a	Using HELP menu		
screen components, tool bars, Formula bar Work book & work sheets, cells, range, data types & entering data, insert rows & columns, resizing rows and columns, selecting cells, moving and copying cells, 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, 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 Inline, Nesting of Member Functions, Private Member Function, Array within a			
screen components, tool bars, Formula bar Work book & work sheets, cells, range, data types & entering data, insert rows & columns, resizing rows and columns, selecting cells, moving and copying cells, 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, 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 Inline, Nesting of Member Functions, Private Member Function, Array within a			
screen components, tool bars, Formula bar Work book & work sheets, cells, range, data types & entering data, insert rows & columns, resizing rows and columns, selecting cells, moving and copying cells, 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, 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 Inline, Nesting of Member Functions, Private Member Function, Array within a			
screen components, tool bars, Formula bar Work book & work sheets, cells, range, data types & entering data, insert rows & columns, resizing rows and columns, selecting cells, moving and copying cells, 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, 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 Inline, Nesting of Member Functions, Private Member Function, Array within a			
screen components, tool bars, Formula bar Work book & work sheets, cells, range, data types & entering data, insert rows & columns, resizing rows and columns, selecting cells, moving and copying cells, 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, 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 Inline, Nesting of Member Functions, Private Member Function, Array within a			
screen components, tool bars, Formula bar Work book & work sheets, cells, range, data types & entering data, insert rows & columns, resizing rows and columns, selecting cells, moving and copying cells, 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, 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 Inline, Nesting of Member Functions, Private Member Function, Array within a			
screen components, tool bars, Formula bar Work book & work sheets, cells, range, data types & entering data, insert rows & columns, resizing rows and columns, selecting cells, moving and copying cells, 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, 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 Inline, Nesting of Member Functions, Private Member Function, Array within a	Ms-Excel: Introduction to spread sheets , features of Ms-excel, Ms-Excel screen		
Work book & work sheets, cells, range, data types & entering data, insert rows & columns, resizing rows and columns, selecting cells, moving and copying cells, 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, 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 Functio			
columns, resizing rows and columns, selecting cells, moving and copying cells, 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, 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, String, String library Functions. Classes and Objects Specifying a class, Defining Member Functions, Making an outside Function Inline, N			
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, 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 Ibirary 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,			
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, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slides — slide show, time setting, Custom Show Printing Slide show, time setting, Custom Show Printing Slides Slide show, time setting, Show Printing Slides Slides show, time sett			
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, 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,			
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, 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,			
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,			
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,	· ·		
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,			
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,	• •		
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,	-		
Presenting slides - slide show, Time setting, Custom Show Printing Slides	Objects-group, order ,		
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,	Applying animation effects, slide effects, slide transition		
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,	Presenting slides- slide show, Time setting, Custom Show		
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,	Printing Slides ,Slide show key board shortcuts		
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,	Introduction to DBMS, Access as a relational DBMS, Tables, Forms ,Queries ,Reports,		
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 Iibrary 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,	Macros , Modules, Data type, Data Validation, Importing Data, Primary Keys ,		
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,	Field Properties SQL (Structural Query Language)		
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,	Open Office: familiarization of Writer, Calc and Impress		
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,	Paper III : C++ and Java 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,	Module I- C++ (Theory 15 hrs.: Practical 15 hrs.)		
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,	Principles of Object-Oriented Programming: -		
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,			
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,			
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,			
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,	-		
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,	•		
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,			
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 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,	· •		
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,			
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,			
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,			
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,			
Specifying a class, Defining Member Functions, Making an outside Function Inline, Nesting of Member Functions, Private Member Function, Array within a class,			
Nesting of Member Functions, Private Member Function, Array within a class,	Classes and Objects		
-	Specifying a class, Defining Member Functions, Making an outside Function Inline,		
Memory allocation for objects, Static Data Member, Static Member Functions, Array	Nesting of Member Functions, Private Member Function, Array within a class,		
$^{\circ}$ 1	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 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 –of-file, 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 packages-

naming conventions-creating packages accessing a package- using a package-adding 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 Cycle-initialization 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 Systems Documentation,	
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 Control-Table Layout Panel

Menu & Toolbars: Context Menu Strip-Menu Strip-Status 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.
- Understand the practical concepts of Ms Excel, MS Word, MS Power point, and MS Access.
- 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 Comprising 2 semesters Time: Week days - 3 hours per day 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

Students - B18

SI. No	ID. No	Temporary ID	Name	Image	Course	Reg. Fee	Challan No.	Status	Action
1	B18K30G001		BENNETT K SHAJI Mob: 9947924147 Land Ph: App. No: 820372		DCA	1888	B18K0300001	Registered	
2	B18K30G002		ALEENA SABU Mob:9400666344 Land Ph: App. No: 820373		DCA	1888	B18K0300001	Registered	
3	B18K30G003		ANAGHA A Mob : 9207067991 Land Ph : App. No : 820202		DCA	1888	B18K0300001	Registered	
4	B18K30G004		VAISHNAVI NAIR Mob:9971125251 Land Ph: App. No: 820115		DCA	1888	B18K0300001	Registered	
5	B18K30G005		NIDHIN SHIJI Mob:9747867610 Land Ph: App. No: 820203		DCA	2360	B18K0300001	Registered	
6	B18K30G006		NEVIL JOSEPH BABU Mob: 7025165749 Land Ph: App. No: 820236		DCA	2360	B18K0300001	Registered	
7	B18K30G007		AMAL JYOTHIS Mob: 8606622154 Land Ph: App. No: 820086		DCA	2360	B18K0300001	Registered	
8	B18K30G008		REVATHY C A Mob: 9746037235 Land Ph: App. No: 820374		DCA	1888	B18K0300001	Registered	
9	B18K30G009		VISMAYA SEBASTIAN Mob:9496062866 Land Ph: App. No: 820413		DCA	1888	B18K0300001	Registered	
10	B18K30G010		MERLIN JOY Mob:9562852618 Land Ph: App. No: 820294		DCA	1888	B18K0300001	Registered	
11	B18K30E001		ANJALY VINCENT Mob: 9497579281 Land Ph: App. No: 820481		PDCFA	1770	B18K0300002	Registered	
12	B18K30E002		JILSMOL JOHN Mob:9562058426 Land Ph: App. No: 820216		PDCFA	1770	B18K0300002	Registered	
13	B18K30E003		ABHIJITH PREM Mob: 9207312268 Land Ph:		PDCFA	1770	B18K0300002	Registered	

STUDENTS LIST

SI No.	Class No. / Admission No	Name of the Student	Department
1	1762	Bennett K Shaji	English SF
2	1763	Aleena Sabu	English SF
3	1679	Anagha A	English SF
4	1761	Vaishnavi Nair	English SF
5	1751	Nidhin Shiji	English SF
6	1881	Nevil Joseph	English SF
7	1754	Amal Jyothis	English SF
8	1747	Revathy C A	English SF
9	1760	Vismaya Sebastian	English SF
10	1916	Merlin Joy	English SF

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 Add-on Classes?
1	Bennett K Shaji	Excellent	Excellent	Excellent	Exceeded expectations
2	Aleena Sabu	Good	Good	Good	Met expectations
3	Anagha A	Good	Good	Good	Met expectations
4	Vaishnavi Nair	Good	Average	Good	Met expectations
5	NidhinShiji	Good	Good	Good	Met expectations
6	Nevil Joseph	Good	Excellent	Excellent	Exceeded expectations

7	Amal Jyothis	Excellent	Excellent	Excellent	Exceeded expectations
8	Revathy C A	Excellent	Excellent	Excellent	Exceeded expectations
9	Vismaya Sebastian	Excellent	Excellent	Excellent	Exceeded expectations
10	Merlin Joy	Excellent	Excellent	Excellent	Exceeded expectations

Mark List

SI.			Theory (200)	Practical (200)	% of	
No	Name	Course	, ,	, ,	Marks	Grade
1	Bennett K Shaji	DCA	148	164	78	А
2	Aleena Sabu	DCA	148	152	75	А
3	Anagha A	DCA	156	160	79	А
4	Vaishnavi Nair	DCA	152	156	77	Α
5	NidhinShiji	DCA	136	140	69	В
6	Nevil Joseph	DCA	140	148	72	А
7	Amal Jyothis	DCA	132	140	68	В
8	Revathy C A	DCA	132	144	69	В
9	Vismaya Sebastian	DCA	156	160	79	А
10	Merlin Joy	DCA	128	148	69	В

ATTENDANCE SHEET - DCA 2019-20
COMMERCE (SF)

							1									1		Γ	S.No
10 Merlin Joy	8 Revathy CA	7 Amal Jyothis	6 Nevil Joseph	4 Vaishnavi Nair	3 Anagha A	2 Alcena Sabu	1 Bennett K Chall		10 Merlin Joy	9 Vismaya Sebastian	8 Revethy C A	7 Amal Jyothis	6 Nevil Joseph	5 Nidhla Shiji	4 Vaishnavi Nair	3 Anagha A	2 Aleena Sabu	I Bennett K Shaji	Name of Candidate
View View View Q View View View View View View View View	一時一大時間の一大の一大の一大の一大の一大の一大の一大の一大の一大の一大の一大の一大の一大の	THE WAS THE TANK THE	NATIONAL STATE OF THE PARTY OF	であるとはないたがないのかんかれた	1	A. Council Berend Summer Berend Berend Bream Bream Bream &	26/10/19 02/11/19 16/11/19 23/11/19 35/11/19 02/12/19 02/12/19 12/12/19	The same of the sa	一大学·大学·大学·大学·大学·大学·大学·大学·大学·大学·大学·大学·大学·大	45 45 45 65 KB	はかるである。また一大ないではないはないとはないというないというないというできるというできるというできないというできないというできないというできないというできないというできないというできないというできない	からしているのは、これは、これは、これに、これに、これに、これに、これに、これに、これに、これに、これに、これに	TOBILL ZINE ZINE ZINE ZINE	一個人 100 100 100 100 100 100 100 100 100 10	方がりで描きるである。大統領大統領と大統領大人の対け、一部が一方	The state of the s	IJ	61501/6 61/30175 61/30141 61/08/64 61/10/10	and action to the land and a second

	S.No		11			S.No
5 Nidhin Shijj 6 Nevil Joseph 7 Amal Jyathis 8 Revathy C A 9 Vismaya Sebastian 10 Merlin Joy	Name of Candidate 1 Bennett K Shaji 2 Alteena Sabu 3 Anagha A 4 Valshnavi Naji	9 Vismaya Sebastian 10 Merlin Joy	5 Nevil Joseph 7 Amai Jyothis 8 Revethy C A	3 Anagha A 4 Vaishnavi Nair 5 Nidhin Shiji	1 Bennett K Shaji 2 Aleena Sabu	Name of Candidate
	2) 1041 20 1041 20	45	12 P	Z A P	700年	25/0/20
	a mala		8 \ 2 }	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		or calcalia ac
	The self	補			41	referby o
	10 10 10 10 10 10 10 10 10 10 10 10 10 1	***		が変	1 10 00 T	3
利和利用	Houles And Car	1 5 B	- F	34.0	1 1021 10	COMMERCE (SF)
P B P P P	12 m 20				Swart -	
旅鄉門	11 05/20 Barrett	不			0.0	-10
	では、				21103/20 28/03/20	
	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	No.			04/04/20	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MAN AND AND AND AND AND AND AND AND AND A	13.2		06/04/20 04/04/20	
	12 Pr. 18	18			04/04/20	

DEVA MATHA COLLEGE, KURAVILANGAD

Re-Accredited by NAAC With 'A' Grade



Certificate of Merit

This Certificate is awarded to

Vaishnavi Nair, IIIrd B.A. English Triple Main

for successfully completing Add-on Course,

Diploma in Computer Application

conducted in association with Kerala State Rutronix during

the academic year 2019-20 and securing A Grade

Place: Kuravilangad Date: 20/05/2020

Conducted by

Department of Commerce (St

Deva Matha College, Kuravilangud

Kuravilangad P.O., Kottayam District, Kerala, India Por 184611 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)

THATHA COLLEGE MANATHA COLLEGE

Principal
Deva Matha College
Kuravilangad - 686 633