SRM UNIVERSITY
(Under section 3 of UGC Act 1956)

DEPARTMENT OF COMPUTER APPLICATIONS

B.C.A. - FIRST YEAR
(2015-2016 REGULATION)

FIRST SEMESTER

LESSON PLAN

SRM UNIVERSITY

FACULTY OF SCIENCE AND HUMANITIES

SRM NAGAR, KATTANKULATHUR – 603 203

Course Code	Course Title	L	T	P	Total of LTP	C
UCA15101	**OPEN OFFICE AND LINUX**	4	--	--	4	4

UNIT I - INTRODUCTION TO LINUX

What Is Linux? -The Problems with Windows -The Benefits of Linux - Proprietary Software and the GPL- GNU and Linux Together- Different Flavors of Linux- Who Uses Linux?- Understanding How Linux Differs from Windows- Using Ubuntu

UNIT II - BASH SHELL

What Is the BASH Shell? -Working with Files-Listing Files-Copying Files and Directories -Moving Files and Directories -Deleting Files and Directories -Changing and Creating Directories-Real Files and Virtual Files. -Users and File Permissions -The File System Explained -File Searches -Using the find Command -Using the locate Command -Using the where is Command-File Size and Free Space -Viewing File Sizes -Finding Out the Amount of Free Space.

UNIT III - WRITER — THE WORD PROCESSOR

Creating a Document -Opening a Document -Laying Out the Page-Setting paper size, margins, and orientation -Creating headers and footers -Numbering pages -Entering and Editing Text-Modifying text-Moving and copying text -Finding and replacing text - Correcting mistakes automatically-Printing -Adding character to your characters - Planning Your Paragraphs-Aligning paragraphs -Spacing your lines -Making Lists -Bulleting lists-Numbering lists-Using a style -Creating a style - tables and columns

UNIT IV - CALC — THE SPREADSHEET

Creating a Spreadsheet -Inputting Your Data -Entering your data -Editing your data -Filling cells automatically -Managing Columns and Rows-Copying, pasting, cutting, dragging, and dropping your cells -Adding the Art -Formula Basics-Adding, Subtracting, and More - Adding and other arithmetic -Adding with the Sum function -Rocketing into Orbit with Functions Using the AutoPilot: Functions dialog box -Editing functions -Entering functions manually -Copying and pasting formulas -Creating formula arrays -Recalculating formulas -Creating Magic Formula-Nesting functions -Creating conditional formulas

UNIT V - IMPRESS — THE PRESENTATION

Creating a Presentation -Opening an existing presentation -Adding Slides -Adding text to a slide -Saving Your Presentation for Posterity - Making Presentations Picture Perfect - Adding Images -Clipping art -Drawing objects -Coloring Backgrounds -Creating a plain-colored background -Creating a gradient background -Hatching a background -Using a bitmap image as a background -Creating 3-D text-Inserting 3-D objects -Animating Impressively -Using Text Effects Effectively -Creating Animation Effects -Creating Animated GIF files -Adding Slide Transition Effects - Showing a Presentation -Setting slide timing -Hiding slides -Specifying slide show settings -Delivering a Slide Show .

TEXT BOOKS

TB1	Keir Thomas and Andy Channelle with Jaime Sicam (2009), "Beginning Ubuntu Linux" , Apress
TB2	Gurdy Leete, Ellen Finkelstein, and Mary Leete (2004), "Openoffice.org for dummies", Wiley Publishing, Inc.

LESSON PLAN

Subject Name: **OPEN OFFICE AND LINUX**

Subject Code: **UCA15101**

UNIT I		
Lecture Hour	**Description**	**Reference with chapter**
1	Introduction to Linux	TB-1,Ch-1
2	What Is Linux	TB-1,Ch-1
3	The Problems with Windows	TB-1,Ch-1
4	The Benefits of Linux	TB-1,Ch-1
5	Proprietary Software and the GPL	TB-1,Ch-2
6	GNU and Linux Together	TB-1,Ch-2
7	Different Flavors of Linux	TB-1,Ch-2
8	Who Uses Linux	TB-1,Ch-3
9	Understanding How Linux Differs from Windows	TB-1,Ch-3
10	Using Ubuntu	TB-1,Ch-3

UNIT II		
Lecture Hour	**Description**	**Reference with chapter**
11	What Is the BASH Shell?	TB-1,Ch-13
12	Working with Files-Listing Files	TB-1,Ch-13
13	Copying Files and Directories, Moving Files and Directories	TB-1,Ch-13
14	Deleting Files and Directories, Changing and Creating Directories	TB-1,Ch-13
15	Real Files and Virtual Files	TB-1,Ch-14
16	Users and File Permissions	TB-1,Ch-14
17	The File System Explained	TB-1,Ch-14
18	File Searches	TB-1,Ch-14
19	Using the find Command	TB-1,Ch-14
20	Using the locate Command	TB-1,Ch-14
21	Using the whereis Command	TB-1,Ch-14
22	File Size and Free Space	TB-1,Ch-14
23	Viewing File Sizes	TB-1,Ch-14
24	Finding Out the Amount of Free Space	TB-1,Ch-14

UNIT III		
Lecture Hour	**Description**	**Reference with chapter**
25	Creating a Document, Opening a Document	TB-2,C h-3
26	Laying Out the Page-Setting paper size, margins, and orientation	TB-2,C h-3
27	Creating headers and footers, Numbering pages	TB-2,C h-3
28	Entering and Editing Text, Modifying text	TB-2,C h-3
29	Moving and copying text	TB-2,C h-3
30	Finding and replacing text	TB-2,C h-3
31	Correcting mistakes automatically	TB-2,C h-3
32	Printing ,Adding character to your characters	TB-2,C h-3
33	Planning Your Paragraphs, Aligning paragraphs	TB-2,C h-4
34	Spacing your lines ,Making Lists	TB-2,C h-4
35	Bulleting lists, Numbering lists	TB-2,C h-4
36	Using a style ,Creating a style , tables and columns	TB-2,C h-4

UNIT IV		
Lecture Hour	**Description**	**Reference with chapter**
37	Creating a Spreadsheet ,Inputting Your Data	TB-2,C h-8
38	Entering your data ,Editing your data	TB-2,C h-8
39	Filling cells automatically ,Managing Columns and Rows	TB-2,C h-8
40	Copying, pasting, cutting, dragging, and dropping your cells	TB-2,C h-9
41	Adding the Art	TB-2,C h-11
42	Formula Basics-Adding, Subtracting, and More	TB-2,C h-12
43	Adding and other arithmetic -Adding with the Sum function	TB-2,C h-12
44	Rocketing into Orbit with Functions Using the AutoPilot	TB-2,C h-12

45	Functions dialog box -Editing functions -Entering functions manually	TB-2,C h-12
46	Copying and pasting formulas -Creating formula arrays	TB-2,C h-12
47	Recalculating formulas -Creating Magic Formula-Nesting functions	TB-2,C h-12
48	Creating conditional formulas	TB-2,C h-12

UNIT V		
Lecture Hour	**Description**	**Reference with chapter**
49	Creating a Presentation -Opening an existing presentation	TB-2,C h-13
50	Adding Slides -Adding text to a slide	TB-2,C h-13
51	Saving Your Presentation for Posterity - Making Presentations Picture Perfect	TB-2,C h-13
52	Adding Images -Clipping art -Drawing objects	TB-2,C h-15
53	Coloring Backgrounds -Creating a plain-colored background -Creating a gradient background	TB-2,C h-15
54	Hatching a background -Using a bitmap image as a background	TB-2,C h-15
55	Creating 3-D text-Inserting 3-D objects -Animating Impressively	TB-2,C h-15
56	Using Text Effects Effectively -Creating Animation Effects	TB-2,C h-16
57	Creating Animated GIF files -Adding Slide Transition Effects	TB-2,C h-16
58	Showing a Presentation -Setting slide timing	TB-2,C h-17
59	Hiding slides -Specifying slide show settings	TB-2,C h-17
60	Delivering a Slide Show	TB-2,C h-17

Course Code	Course Title	L	T	P	Total of LTP	C
UCA15102	**PROGRAMMING IN C**	4	0	0	4	4

INSTRUCTIONAL OBJECTIVES:

At the end of this course the learner is expected:

1. To acquire basic knowledge about Programming in C
2. To gather extensive knowledge in C programming and developing programming skills
3. To strengthen the knowledge on structures, arrays etc., of C programming

UNIT I - OVERVIEW OF C (12 Hours)

Introduction- Importance of C- Basic Structure of C program- Tokens-Variables- Data types- Operators and Express ion- Managing Input and Output Operators.

UNIT II - CONDITIONAL STATEMENTS (12 Hours)

If statement- switch statement- goto statement- while statement- do statement-for statement- continue statement- break statement.

UNIT III - ARRAYS AND FUNCTIONS (12 Hours)

One dimensional array- Two dimensional array- Multidimensional array-Built in functions (Library functions): String Handling functions-User defined functions.

UNIT IV – STRUC TURES, UNIONS AND POINTERS (12 Hours)

Structure definition- Arrays of structures- Structures and functions- Unions- Understanding pointers- Declaring and initializing pointers- Pointers and arrays- Pointers and functions- Pointers and structures.

UNIT V - FILE MANAGEMENT (12 Hours)

Defining and Opening a file- Closing a file- Input output operations on files-Error Handling during I/O operations- Command line arguments.

TEXT BOOKS

1. E. Balagurusamy, (2008), ”Programming in ANSI C” , Second Edition, Tata McGraw Hill.

REFERENCES

1. Kamthane Ashok.N, (2013), ”Programming in C”, 2nd Edition, Pearson Education.
2. Yashvant P. Kanetkar, (2008), “Let us C”, 8th Edition, Infinity science press.

LESSON PLAN

Subject Name: **PROGRAMMING IN C**

Subject Code: **UCA15102**

UNIT I		
Lecture Hour	**Description**	**Reference with chapter**
1	Introduction	T1, Ch-1.1
2	Importance of C	T1, Ch-1.2
3	Sample Programs	T1, Ch-1.2-1.7
4	Basic Structure of C Programs	T1, Ch-1.8
5	C Tokens	T1, Ch-2.3-2.5
6	Variables	T1, Ch-2.6
7	Data Types	T1, Ch-2.7
8	Declaration of Variables	T1, Ch-2.8-2.13
9	Operators and Expressions	T1, Ch-3.1-3.15
10	Managing Input and Output Operators , Introduction	T1, Ch-4.1
11	Reading a Character	T1, Ch-4.2-4.5

UNIT II		
Lecture Hour	**Description**	**Reference with chapter**
12	If Statement	T1, Ch-5.1
13	Decision Making with if Statement	T1, Ch-5.2
14	Simple If Statement	T1, Ch-5.3
15	The If….. Else Statement	T1, Ch-5.4
16	Nesting of If …. Else Statement	T1, Ch-5.5
17	The Else If Ladder	T1, Ch-5.6
18	Switch Statement	T1, Ch-5.7
19	The ?:Operator	T1, Ch-5.8
20	Goto Statement	T1, Ch-5.9
21	While Statement	T1, Ch-6.2
22	Do Statement	T1, Ch-6.3
23	For Statement	T1, Ch-6.4
24	Jumps in Loop	T1, Ch-6.5
25	Continue Statement	T1, Ch-6.5
26	Break Statement	T1, Ch-6.5

UNIT III		
Lecture Hour	**Description**	**Reference with chapter**
27	One Dimensional Arrays	T1, Ch-7.2
28	Declaration of One Dimensional Arrays	T1, Ch-7.3-7.4
29	Two Dimensional Arrays	T1, Ch-7.5

30	Initializing Two Dimensional Array	T1, Ch-7.6
31	Multi Dimensional Array	T1, Ch-7.7
32	Dynamic Array	T1, Ch-7.8
33	String Handling Function	T1, Ch-8.8
34	Table of String	T1, Ch-8.9
35	User Defined Function	T1, Ch-9.2
36	Definition of Function	T1, Ch-9.5
37	Return Values and Their Type	T1, Ch-9.6
38	Function Calls	T1, Ch-9.7
39	Function Declaration	T1, Ch-9.8-9.9
40	No Arguments and No Return Values	T1,Ch-9.10-9.16

UNIT IV		
Lecture Hour	**Description**	**Reference with chapter**
41	Structure Definition	T1, Ch-10.2
42	Arrays of Structures	T1, Ch-10.8
43	Structures and Functions	T1, Ch-10.11
44	Unions	T1, Ch-10.12
45	Understanding Pointer	T1, Ch-11.2
46	Declaring Pointer Variable	T1, Ch-11.4
47	Initializing of Pointer variables	T1, Ch-11.5
48	Pointers and Arrays	T1, Ch-11.10
49	Array of Pointers	T1, Ch-11.12
50	Pointers as Function arguments	T1, Ch-11.13
51	Functions Returning Pointers	T1, Ch-11.14
52	Pointers and Functions	T1, Ch-11.15
53	Pointers and Structure	T1, Ch-11.16

UNIT V		
Lecture Hour	**Description**	**Reference with chapter**
54	Introduction File concepts	T1, Ch-12.1
55	Defining and Opening a File	T1, Ch-12.2
56	Closing a file	T1, Ch-12.3
57	Input / Output Operations on Files	T1, Ch-12.4
58	Error Handling During I / O Operations	T1, Ch-12.5
59	Random Access Files	T1, Ch-12.6
60	Command Line Arguments	T1, Ch-12.7