

**SACRED HEART COLLEGE (AUTONOMOUS)**

**Department of Computer Science**

**BACHELOR OF COMPUTER APPLICATIONS**

**[MOBILE APPLICATIONS AND CLOUD TECHNOLOGY]**

**Course plan**

**Academic Year 2016 - 17**

**Semester 1**

### COURSE STRUCTURE

<b>Course Code</b>	<b>Title Of The Course</b>	<b>No. Hrs./Week</b>	<b>Credits</b>	<b>Total Hrs./Sem</b>
U1CCENG1	Communication Skills	5	4	90
U1CPCMT1	Foundation of mathematics	4	4	72
U1CRBCA1	Computer fundamentals & organization	4	4	72
U1CRBCA2	Programming in 'C'	4	3	72
U1CRBCA3	Introduction to Linux	4	3	72
U1PRBCA1	Programming in 'C' – Lab	2	1	36
U1PRBCA2	Introduction to Linux -Lab	2	1	36

### COURSE PLAN - COMMUNICATION SKILLS IN ENGLISH

<b>PROGRAMME</b>	<b>BACHELOR OF COMPUTER APPLICATIONS</b>	<b>SEMESTER</b>	<b>1</b>
<b>COURSE CODE AND TITLE</b>	<b>U1CCENG1: COMMUNICATION SKILLS IN ENGLISH</b>	<b>CREDIT</b>	<b>4</b>
<b>HOURS/WEEK</b>	<b>5</b>	<b>HOURS/SEM</b>	<b>90</b>
<b>FACULTY NAME</b>	<b>Sunil K V</b>		

<b>COURSE OBJECTIVES</b>
Understand the mechanics of English language and comprehend the plain meaning of simple narrations, announcements and instructions.
Make inferences about the implications of statements from stress and tone recognise the various registers of speech.
Listen to formal presentations and prepare lecture notes using the appropriate format.
Use English language for a variety of speaking contexts including conversations, presentations, speeches, discussions and negotiations.
Critically evaluate presentations, narrations, speeches and analyse and evaluate their content and respond to them appropriately.
Creatively respond to one's surroundings in the form of dramatic works, poetry, narrations, and songs, and perform them before an audience.
Understand the mechanics of English language and comprehend the plain meaning of simple narrations, announcements and instructions.

<b>Sessions</b>	<b>Topic</b>	<b>Method</b>	<b>Value Additions</b>	<b>Remarks</b>
1 – 3	Introduction to Communication Skills	Lecture		
4 – 6	Phonetics: Introduction	PPT presentation		
7 - 9	Unit 1 – Write as you speak	Audio presentation & Exercises		
10 – 12	Unit 2 – Dip in Deep Sea	Audio presentation & Exercises		
13 – 15	Unit 3 – Many Mad Men	Audio presentation & Exercises		

16 – 18	Unit 4 – A Cot Caught in a Cart	Audio presentation & Exercises		
19 – 21	Unit 5 – Look for Good Food	Audio presentation & Exercises		
22 – 24	Unit 6 – Bad Luck, Early Worm and Unit	Audio presentation & Exercises		
25 – 27	Unit 7 - Again and Again	Audio presentation & Exercises		
28 – 30	Unit 8 – A China Clay Toy	Audio presentation & Exercises		
31 – 33	Unit 9 – Holy Cow	Audio presentation & Exercises		
34 – 36	Unit 10 – Here, There, Everywhere	Audio presentation & Exercises		
37 – 39	IAT – 1			
40 – 42	Discussion on the test paper	Discussion		
43 - 45	Unit 11 – Bzzing Bees & Hissing Snakes Unit 12 – Pleasure Ships on the sea	Audio presentation & Exercises		
46 – 48	Unit 13 – A Fine Vine Unit 14 – Thanks Brother!	Audio presentation & Exercises		
49 – 51	Unit 15 – Jane’s Chain Unit 16 – A Smiling King	Audio presentation & Exercises		
52 – 54	Unit 17 – Betty’s Bitter Butter Unit 18 – Have Your Way	Audio presentation & Exercises		
55 - 57	Unit 19 – Right Road, Light Road Revision	Audio presentation & Exercises Drill Exercises		

58 – 60	Revision Exercises	Drill Exercises		
61 – 63	Unit 20 - Pronunciation: Syllables	Lecture Session		
64 – 66	Unit 21 - Word stress 1	Audio presentation & Exercises		
67 - 69	Unit 22 - Word stress 2	Audio presentation & Exercises		
70 - 72	Unit 22 - Stress and Parts of Speech	Audio presentation & Exercises		
73 – 74	Unit 23 - Sentence Stress	Audio presentation & Exercises		
75 – 76	Holiday – SreeNarayana guru samadhi			
77 - 78	Holiday – Bakrid			
79 – 80	IAT – 2			
81 – 82	Performance Analysis _ IAT 2	Discussion		
83 - 84	Unit 24 – Weak forms & Strong Forms Unit 25 – Contracted forms	Audio presentation & Exercises		
85 – 86	Unit 26 – Intonation	Audio presentation & Exercises		
87 – 88	Unit 27 – Different accents	Lecture and Drill		
89 - 90	Influence of Mother tongue	Lecture and Drill		

## ASSIGNMENTS

	<b>Topic of Assignment &amp; Nature of assignment (Individual/ Group – Written/ Presentation – Graded or Non-graded etc)</b>
1	Write a note on your bus trip the college & present it before the class.
2	Write a descriptive note on the sights and sounds of the college canteen + presentation before the class
3	Write an interesting conversation you listened to recently and present it before the class with your partner.
4	Identify a passage from any textbook or magazine, underline a pair of consonant sounds and read the same in the class giving special emphasis to the pair of sounds chosen
5	Write a description of the Lakeview ground
6	Describe the college auditorium
7	Describe the sights and sounds in the portico of the college on any given day
8	Describe the aquarium in the portico
9	Narrate your experiences of any day on the campus

## REFERENCE

V.Sasikumar, P Kiranmai Dutt and Geetha Rajeevan, . Communication Skills in English. Cambridge University Press and Mahatma Gandhi University.

### Further Reading

Sl.No	Title	Author	Publisher & Year
1	A Course in Listening and Speaking I & II	Sasikumar V.,Kiranmai Dutt and Geetha Rajeevan	New Delhi: CUP, 2007
2	Study Listening: A Course in Listening to Lectures and Note-taking	Tony Lynch	New Delhi: CUP, 2008
3	Study Speaking: A Course in Spoken English for Academic Purposes	Anderson, Kenneth, Joan Maclean and Tony Lynch	New Delhi: CUP, 2008
4	Study Reading: A Course in Reading Skills for Academic Purposes	Glendinning, Eric H. and Beverly Holmstrom	New Delhi: CUP, 2008
5	Communication Studies	Sky Massan	Palgrave Macmillan
6	Effective Communication for Arts and Humanities Students	Joan Van Emden and Lucinda Becker	Palgrave Macmillan

**COURSE PLAN - FOUNDATIONS OF MATHEMATICS**

<b>PROGRAMME</b>	<b>BACHELOR OF COMPUTER APPLICATIONS</b>	<b>SEMESTER</b>	<b>1</b>
<b>COURSE CODE AND TITLE</b>	<b>U1CPCMT1: FOUNDATIONS OF MATHEMATICS</b>	<b>CREDIT</b>	<b>4</b>
<b>HOURS/WEEK</b>	<b>4</b>	<b>HOURS/SEM</b>	<b>72</b>
<b>FACULTY NAME</b>	<b>NEETHU A S</b>		

<b>COURSE OBJECTIVES</b>
Understand the concepts and prove statements about sets and functions
Understand relations, its properties, representation, equivalence relations and partial ordering
Understand and apply concepts of Propositional logic, Predicates and Quantifiers
Familiarize mathematical Symbols and standard methods of proofs.
Understand the basic concepts of Number theory

<b>SESSION</b>	<b>TOPIC</b>	<b>LEARNING RESOURCES</b>	<b>VALUE ADDITIONS</b>	<b>REMARKS</b>
<b>MODULE I</b>				
1	Set Theory Introduction	Lecture		
2	Basic Operations on Sets	Lecture		
3	Set Identities	Lecture		
4	Computer Representation of sets	Lecture		
5	Functions	Lecture		
6	Algebraic operations on real Functions	Lecture		
7	Composition of Functions	Lecture		
8	Bijjective Functions	Lecture		
9	Inverse Functions	Lecture		
10	Graphs of functions	Lecture		
11	Increasing and Decreasing functions	Lecture		
12	Sequences	Lecture		
13	Summations	Lecture		
14	Cardinality	Lecture		
<b>MODULE II</b>				
15	Relations Introduction	Lecture		
16	Types of Relations on a Set	Lecture		
17	Combinations of Relations	Lecture		
18	Representation of relations on Finite Sets	Lecture		
19	Representation relations using Digraphs	Lecture		
20	n-ary relations and their applications	Lecture		
21	operations on n-ary relations	Lecture		

22	Equivalence Relations	Lecture		
23	Partitions	Lecture		
24	Partial Orderings	Lecture		
25	Hasse Diagrams	Lecture		
26	CIA-1			
27	Covering Relation	Lecture		
28	Maximal and Minimal elements	Lecture		
29	Lattices	PPT/Lecture		
30	Topological Sorting	PPT/Lecture		
31	Revision			
32				
<b>MODULE III</b>				
33	Mathematical Logic Introduction	Lecture		
34	Propositions -simple and compound	Lecture		
35	Logical operators	Lecture		
36	Conditional, Biconditional Statements	Lecture		
37	Precedence of Logical Operators	Lecture		
38	Logic and Bit operations	Lecture		
39	Tautologies and contradictions	Lecture		
40	Logical Equivalences - Laws of logic	Lecture		
41	Predicates, Quantifiers	Lecture		
42	Universal Quantifiers, Existential Quantifiers, Binding Variables	Lecture		
43	Logical Equivalence involving quantifiers	Lecture		
44	Negation of quantified expressions	Lecture		
45	Nested Quantifiers	Lecture		
46	Arguments	Lecture		
47	Rules of Inference for propositions	Lecture		
48	Rules of Inference for quantified statements	Lecture		
49	Methods of proving theorems	Lecture		
<b>MODULE IV</b>				
51	Theory of Numbers – Divisibility	Lecture		
52	Prime and Composite Numbers	Lecture		
53	GCD, Theorems on division	Lecture		
54	Divisors of a given number	Lecture		
55	Euler's Function	Lecture		
	Congruences -Theorems	Lecture		
56	Fermat's theorem	Lecture	Debate	
57	Wilson's theorem	Lecture		
58	Lagrange's theorem	Lecture		
59	Revision	PPT/Lecture		
60	Revision	PPT/Lecture		
61	Revision	PPT/Lecture		



62	Revision	PPT/Lecture		
CIA – II				
63	Revision			
64	Revision			
65	Revision			
66	Revision			
67	Revision			
68	Previous Question Paper Discussion		Discussion	
69	Previous Question Paper Discussion		Discussion	
70	Previous Question Paper Discussion			
71	Evaluation about the course			
72	Doubt clearing			

### INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	4/9/2016	Problems on set identities, bijective functions, inverse functions
2	28/9/2016	Problems on Equivalence relations, partial orderings, Hasse diagram, Lattice
3	28/9/2016	Problems on propositions, predicates, quantifiers, rule of inference, methods of proving theorems
4	02/9/2016	Problems on congruences, fermat theorem, wilson theorem, Lagrange's theorem

### GROUP ASSIGNMENTS/ACTIVITES – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	2/9/2016	Hasse diagram (Group Discussion)

### REFERENCES

- K.H. Rosen: Discrete Mathematics and its Applications (Sixth edition), Tata McGraw Hill Publishing Company, New Delhi.
- S. Bernard and J.M Child: Higher Algebra, AITBS Publishers, India,2009.

### COURSE PLAN - COMPUTER FUNDAMENTALS & ORGANIZATION

<b>PROGRAMME</b>	<b>BACHELOR OF COMPUTER APPLICATIONS</b>	<b>SEMESTER</b>	<b>1</b>
<b>COURSE CODE AND TITLE</b>	<b>U1CRBCA1: COMPUTER FUNDAMENTALS &amp; ORGANIZATION</b>	<b>CREDIT</b>	<b>4</b>
<b>HOURS/WEEK</b>	<b>4</b>	<b>HOURS/SEM</b>	<b>72</b>
<b>FACULTY NAME</b>	<b>NEETHU THOMAS</b>		

<b>COURSE OBJECTIVES</b>
Describe the fundamental organization of a computer system
Distinguish the organizations of various parts of a system memory
Identify the principal software and hardware components.
Understand number system ,Boolean algebra and basic gates
Solve the common business problems using appropriate information technology applications
Describe the various network standards and communication software

<b>SESSION</b>	<b>TOPIC</b>	<b>LEARNING RESOURCES</b>	<b>VALUE ADDITIONS</b>	<b>REMARKS</b>
<b>MODULE I</b>				
1 – 2	General features of a computer	PPT	video	
3 – 4	Generation of computers	PPT/Lecture		
5 – 6	Personal computer	PPT/Lecture		
7 – 8	workstation, mainframe computer and super computers	PPT/Lecture	e-resource	
9 – 10	Computer applications	PPT/Lecture		
11 – 12	data processing	PPT/Lecture		
13 – 14	information processing, commercial, office automation	Lecture		
15 – 16	industry and engineering, healthcare	Lecture		
17 – 18	education, graphics and multimedia	Lecture		
<b>MODULE II</b>				
19 – 20	<b>Computer Organization</b> , central processing unit	Lecture		
21 – 22	computer memory – primary memory and secondary memory.	PPT/Lecture		
23 – 24	Secondary storage devices – Magnetic and optical media	PPT/Lecture		
25 – 26	Input and output units. OMR, OCR, MICR	PPT/Lecture		

27 – 28	scanner, mouse, modem.			
<b>MODULE III</b>				
29 - 30	Computer hardware and software	PPT/Lecture		
31 – 32	Machine language and high level language	Lecture		
33 – 34	Application software	Lecture		
<b>CIA I</b>				
35 – 36	computer program, operating system	Lecture		
37 – 38	Computer virus, antivirus and computer security	Lecture		
39 – 40	Elements of MS DOS and Windows OS	PPT/Lecture		
41 – 42	Computer arithmetic, Binary, octal and hexadecimal number systems	PPT/Lecture		
43 – 44	Algorithm and flowcharts	PPT/Lecture		
45 – 46	elements of a database and its applications	PPT/Lecture		
47 – 48	Basic Gates- NOR,NAND,XOR,XNOR gates)	Lecture		
49 - 50	(Demorgans theorems, duality theorem,	Lecture		
51 – 52	Boolean expressions and logic diagrams, Types of Boolean expressions	Lecture		
<b>MODULE IV</b>				
53 – 54	Word processing	Lecture		
55 – 56	electronic spread sheet	Lecture		
57 - 58	An overview of MS WORD	PPT/Lecture		
59	MS EXCEL	PPT/Lecture		
60	MS POWERPOINT	PPT/Lecture		
61	Application			
<b>MODULE V</b>				
62	<b>Introduction to Networking</b>	PPT/Lecture		
63	Network of computers.	PPT/Lecture		
64	Types of networks	PPT/Lecture		
65	LAN, Intranet and Internet	Lecture	Quiz	
66	Internet Applications	PPT/Lecture		
<b>CIA II</b>				
67	World wide web, E-mail,	PPT/Lecture		
68	browsing and searching, search engines	PPT/Lecture		
69	multimedia applications.	PPT/Lecture		
70	Revision			
71	Revision			
72	Revision			

### INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	8/8/2016	database and its applications
2	28/9/2016	Types of networks

### GROUP ASSIGNMENTS/ACTIVITES – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	28/9/2016	Create MS WORD, MS EXCEL, MS POWERPOINT pages

### REFERENCES

- Alexis Leon and Mathews Leon (1999) : Fundamentals of information Technology, Leon Techworld Pub.
- Jain, S K (1999): Information Technology “O” level made simple, BPB Pub
- Jain V K (2000) “O” Level Personal Computer software, BPB Pub.
- Rajaraman, V (1999): Fundamentals of Computers, Prentice Hall India
- Hamacher, Computer Organization McGrawhill
- Alexis Leon: Computers for everyone. Vikas, UBS
- Anil Madaan : Illustrated Computer Encyclopedia. Dreamland Pub
- Sinha. Computer Fundamentals BPB Pub.

### Web resource references:

[https://www.tutorialspoint.com/computer\\_fundamentals/index.htm](https://www.tutorialspoint.com/computer_fundamentals/index.htm)

## COURSE PLAN - PROGRAMMING IN C

<b>PROGRAMME</b>	<b>BACHELOR OF COMPUTER APPLICATIONS</b>	<b>SEMESTER</b>	<b>1</b>
<b>COURSE CODE AND TITLE</b>	<b>U1CRBCA2: PROGRAMMING IN C</b>	<b>CREDITS</b>	<b>3</b>
<b>HOURS/WEEK</b>	<b>4</b>	<b>HOURS/SEM</b>	<b>72</b>
<b>FACULTY NAME</b>	<b>ACHAMMA CHERIAN</b>		

### COURSE OBJECTIVES

Solve problems and Produce algorithms, pseudocodes and flowcharts for it.
Understand the basic concepts of c program and different types of data.
Apply different Decision Making statements and loops
Implement functions
Understand and summarize different File handling operations

<b>SESSION</b>	<b>TOPIC</b>	<b>LEARNING RESOURCES</b>	<b>VALUE ADDITIONS</b>	<b>REMARKS</b>
<b>MODULE 1</b>				
1.	Introduction			
2.	Syllabus Discussion			
3.	Problem Definition, Problem Solving		Q & A Session	
4.	Logic developments tools - Algorithm	Lecture		
5.	Flowcharts	Lecture		
6.	pseudo code	Lecture		
7.	Modular programming	Lecture		
8.	Structured and object oriented	Lecture		
9.	Top down and bottom up approaches	Lecture		
10.	features of a good computer program	Lecture		
<b>MODULE 2</b>				
11.	<b>C language basics:</b> C character set,	Lecture	Q & A Session	
12.	Identifiers and keywords	Lecture		
13.	Enumeration type, constants	Lecture		
14.	variables, declarations	Lecture		
15.	qualifiers – long, short and unsigned declarations, expressions, symbolic constants	Library		
16.	input/output functions	Lecture		

17.	compound statements	Lecture		
18.	arithmetic operators, unary operators, relational and logical operators,	Lecture		
19.	assignment operators, increment and decrement operators	Lecture	Quiz	
20.	Precedence and order of evaluation, conditional operators	Lecture		
21.	bit operators, type casting	Lecture		
22.	using library functions in math.h			
<b>MODULE 3</b>				
23.	<b>Control flow:</b> If statements	Lecture	Q & A Session	
24.	Different forms of if and its syntax	PPT/Lecture		
25.	Uses of if statement	Programs	Video	
26.	REVISION	Seminar		
27.	Doubt clearans	Discussion		
<b>CIA – I</b>				
28.	Answer Discussion	Discussion		
29.	switch statements	PPT/Lecture	Q & A Session	
30.	looping – for loop statement	PPT/Lecture		
31.	while loop statement	PPT/Lecture		
32.	do ... while statements	PPT/Lecture		
33.	nested loop structure	PPT/Lecture		
34.	Break statement	PPT/Lecture		
35.	continue statement	PPT/Lecture	Video	
36.	go to statement			
37.	<b>Arrays &amp; Strings:</b> Single dimensional arrays	Lecture		
38.	multidimensional arrays	Lecture		
39.	initializing array using static declaration	Lecture		
40.	Searching & Sorting of Arrays	Lecture	Demo video	
41.	Array of Characters, Character arrays and strings	Lecture		
42.	String manipulation programs	Lecture		
43.	String handling Functions.	Lecture		
<b>MODULE 4</b>				
44.	<b>User Defined Functions:</b> Function declaration, definition & scope	Lecture	Q & A Session	
45.	Recursion	Lecture		
46.	Arrays and functions	Lecture		
47.	call by value, call by reference	Lecture		
48.	Revision	Seminar		
49.	Revision	Seminar		
50.	Storage Classes: automatic, external (global), static & registers	Lecture	Quiz	

51.	Storage Classes: Examples	Lecture		
52.	<b>Structures:</b> Definition of Structures, declaration	Lecture		
53.	structure passing to functions, array of structures	Lecture		
54.	arrays with in structures	Lecture		
55.	Revision	Seminar		
56.	Revision	Seminar		
57.	Doubt Clearans	Discussion		
58.	CIA – II			
59.	Answer Discussion	Discussion		
60.	Unions	Lecture		
61.	typedef statements.	Lecture		
MODULE 5				
62.	<b>Pointers:</b> Pointer Definition, pointer arithmetic	Lecture	Q & A Session	
63.	array & pointer relationship	Lecture		
64.	pointer to array, pointer to structure	Lecture		
65.	<b>Files:</b> Types of C preprocessor directives	Lecture		
66.	Introduction to files, fopen(), fscanf(), fprintf(),getc(), putc(), fclose(),	Lecture		
67.	Simple file handling programs	Lecture		
68.	Previous Question Paper Discussion	Discussion		
69.	Previous Question Paper Discussion	Discussion		
70.	Doubt clearing	Discussion		
71.	Evaluation about the course	Discussion		
72.	Revision			

#### INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	6/7/16	Program Techniques & Looping Concepts
2	10/8/16	Functions & its Categories
3	10/9/16	Programs using file

#### BOOKS OF STUDY:

- Programming in ANSI C 4E , E. BalaGuruswamy, TMH
- Programming in C, Byron S Gottfried, Shaum’s Outline series. TMH

#### REFERENCES:

- Computer Fundamentals By P K Sinha&PritiSinha Fourth Edition.
- B. Kernighan and D. Ritchie, “The ANSI C Programming Language”, PHI

### COURSE PLAN - INTRODUCTION TO LINUX

<b>PROGRAMME</b>	<b>BACHELOR OF COMPUTER APPLICATIONS</b>	<b>SEMESTER</b>	<b>1</b>
<b>COURSE CODE AND TITLE</b>	<b>U2CRBCA3: INTRODUCTION TO LINUX</b>	<b>CREDIT</b>	<b>3</b>
<b>HOURS/WEEK</b>	<b>4</b>	<b>HOURS/SEM</b>	<b>72</b>
<b>FACULTY NAME</b>	<b>CHRISTY JACQUELINE</b>		

<b>COURSE OBJECTIVES</b>
Understand the fundamental concepts of Linux OS
Understand the basic set of commands
Discuss shell programming in Linux OS
Distinguish text processing and filter commands
Demonstrate the role and responsibilities of Linux system administrator

<b>SESSION</b>	<b>TOPIC</b>	<b>LEARNING RESOURCES</b>	<b>VALUE ADDITIONS</b>	<b>REMARKS</b>
<b>MODULE I</b>				
1	Introduction to Multiuser System	PPT		
2	History of UNIX	PPT/Lecture		
3	Features and Benefits	PPT/Lecture		
4	Versions of UNIX	PPT/Lecture		
5	Features of UNIX file System	PPT/Lecture		
6	Basic Commands in Linux	PPT/Lecture		
7	Getting started	Lecture		
8	Creating and Viewing files	Lecture		
9	Disk related commands	Lecture		
10	Checking disk free spaces	Lecture		
11	Introduction to various Linux flavors	PPT/Lecture		
12	Debian and rpm packages	PPT/Lecture		
13	Vendors providing Debian and RPM distribution	PPT/Lecture	E-resource	
14	Ubuntu and Fedora	PPT/Lecture		
<b>MODULE II</b>				
15	Inodes	PPT/Lecture		
16	Structure of a regular file	Lecture		
17	Conversion of a path name to an inode	Lecture		
18	Super block	Lecture		
19	Inode assignment to a new file	Lecture		
20	Allocation of disk blocks	PPT/Lecture		



21	System calls for the file system	PPT/Lecture		
22	File creation system calls	PPT/Lecture		
23	Creation of special files	PPT/Lecture		
24	Changing directory and root	Lecture		
25	Changing owner and mode	Lecture		
26	CIA-1			
27	Stat and fstat	Lecture		
28	Dup- pipes	Lecture		
29	Mounting File systems	PPT/Lecture		
30	Unmounting File Systems	PPT/Lecture		
31	Creating links	PPT/Lecture		
32	Link and unlink	Lecture		
<b>MODULE III</b>				
33	Structure of processes	PPT/Lecture		
34	Process states and Transitions	PPT/Lecture		
35	Process transitions	PPT/Lecture		
36	Creating new process	Lecture	Quiz	
37	System calls for process	Lecture		
38	Terminating process	PPT/Lecture		
39	Layout of system memory	PPT/Lecture		
40	Context of a process	PPT/Lecture		
41	Process control	PPT/Lecture		
42	Process creation	Lecture		
43	Signals	PPT/Lecture		
44	Process Termination	PPT/Lecture		
45	Invoking other programs	PPT/Lecture		
46	PID	PPT/Lecture	E-resource	
47	PPID	PPT/Lecture		
48	Shell on a shell	PPT/Lecture		
<b>MODULE IV</b>				
49	Vi Editor	PPT/Lecture		
50	Introduction to text processing	Lecture		
51	Command and edit Mode	PPT/Lecture		
52	Invoking vi	PPT/Lecture	Video	
53	Deleting and inserting Line	PPT/Lecture		
54	Deleting and replacing character	PPT/Lecture		
55	Searching for strings	Lecture		
56	Yanking	Lecture	Quiz	
57	Running shell command macros	PPT/Lecture		
58	Set Window	PPT/Lecture		
59	Set Auto indent	PPT/Lecture		
60	Set Number	PPT/Lecture		
61	Communicating with other users	PPT/Lecture		

62	Commands for communicating with users	PPT/Lecture		
CIA – II MODULE V				
63	Common administrative tasks	Lecture	Demo video	
64	Identifying administrative files	Lecture		
65	Role of system administrator	Lecture	Quiz	
66	Managing user accounts	Lecture		
67	Creating and mounting file system	PPT/Lecture		
68	Checking and monitoring system performance	PPT/Lecture		
69	Getting system information commands	PPT/Lecture		
70	Installing and Removing packages	Lecture		
71	Revision			
72	Revision			

#### INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines

Sl.No	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	27/ 7/2016	Flavors of Linux
2	7/8/2016	Different types of Shell

#### GROUP ASSIGNMENTS/ACTIVITES – Details & Guidelines

Sl.No	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1	25/8/2016	System Administration

#### REFERENCES

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- Guide to UNIX Using LINUX, Jack Dent Tony Gaddis, Vikas/ Thomson Pub. House Pvt. Ltd. 2010

#### WEB RESOURCE REFERENCES:

<https://www.redhat.com/en/topics/linux>