



SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

**(An Autonomous Institution)
TVR NAGAR, ARUPPUKOTTAI ROAD, MADURAI – 625 022**



ANNUAL QUALITY ASSURANCE REPORT 2020 - 21

Teaching Plan

**B.Sc., Computer Science (Security
System Specialization) Course
Plan 2020-21**



SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

DEPARTMENT OF COMPUTER SCIENCE

TEACHING PLAN - ACADEMIC YEAR 2020 -2021

[ODD SEMESTER]

S.NO	SUBJECT CODE	SUBJECT NAME	FACULTY
1	20CS103	Programming in C	Mrs.S.Nirmala Devi
2	20CS104	Digital Principles & Computer Organization	Mrs.N.Anuradha
3	20CS106	Programming using C Lab	Mrs.S.Nirmala Devi
4	20VE109	Value Education	Mr.K.Perumal Kannan
5	19CS301	Java Programming	Mrs.J.Varalakshmi - II Section A & B
6	19CS302	Computer Networks & Cryptography	Mrs.S.Nirmala Devi
7	19CS303	Elective : Data Structures	Dr.R.Parthiban - II Section A & B
8	19CS305	Secure Programming using Java Lab	Mrs.J.Varalakshmi - II Section A & B
9	19CS306	DHTML Lab	Mrs.S.Nirmala Devi - II Section A & B
10	19CS307	Non Major Elective : Office Automation Lab 1	Mrs.V.Gayathri - II Section A & B
11	18CS501	PHP Programming	Mrs.N.Anuradha - III Section A Mrs.K.P.Maheswari - III Section B
12	18CS502	Cloud Computing & Security	Mrs.J.Varalakshmi - III Section A & B
13	18CS503	Cyber Forensics	Mrs.V.Gayathri - III Section A & B
14	18CS504	Cyber Forensics Lab	Mrs.V.Gayathri - III Section A & B
15	18CS505	PHP Programming Lab	Mrs.N.Anuradha - III Section A Mrs.K.P.Maheswari - III Section B
16	18CS508	Computer Graphics Lab	Mrs.S.Nirmala Devi- III Section A & B

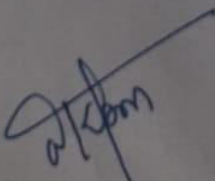
FACULTY INCHARGE

HoD

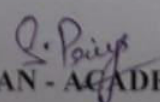
DEAN - ACADEMICS


PRINCIPAL

S.NO	SUBJECT CODE	SUBJECT NAME	FACULTY
1	20UT101	Tamil	Mrs.H.Geetha
2	20UH101	Hindi I	Mrs.Neela
3	20UGE102	General English I	Mr.C.Senthil Kumar
4	20MF108	Allied : Mathematical Foundation	Mrs.Harini
5	19UT301	Tamil III	Mrs.N.Selvi
6	19UH301	Hindi III	Mrs.Neela
7	19UGE302	General English III	Mr.C.Senthil Kumar
8	19NS311	Numerical Skills	Mr.Siva Subramanian
9	19UBT309	NME: Basic Tamil I	Mrs.N.Selvi
10	19UAT310	NME: Advanced Tamil I	Mrs.H.Geetha
11	18CRT509	Campus Recruitment Training III	Mr.S.Sivakumar- III Section A & B


FACULTY INCHARGE


HoD


DEAN - ACADEMICS


PRINCIPAL

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Programming in C

Course Code : 20CS103

Year / Semester : I / I

Section: NIL Total No. of Students :52

No of Credits : 5

Total No. of Contact Hours : 5

Course Teacher (s) Name : Mrs.S.Nirmala Devi

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
1.	C FUNDAMENTALS - Overview of 'C' language.	T - 01	PPT	1	0	1	2
2.	Constants, Variables and Data Types	T-22	PPT	1	0	0	1
3.	Operators, Expressions and Assignment statements	T-51	PPT	1	0	1	2
4.	Decision Making and Branching: Decision Making with IF Statement - Simple IF	T-111	PPT	2	0	0	2
5.	IF...ELSE - Nested IF...ELSE	T-115	PPT	2	0	0	2
6.	ELSE IF Ladder - Switch Statement – goto	T-121	PPT	2	0	0	2

7.	Looping – While - do...while	T-149	PPT	2	0	0	2
8.	for statements	T-156	PPT	2	0	0	2
UNIT – II							
9.	ARRAYS : One-Dimensional Arrays - Declaration of One-dimensional Arrays	T-189	PPT	2	0	0	2
10.	Initialization of One-dimensional Arrays - Two-Dimensional Arrays	T-194	PPT	2	0	1	3
11.	Initialization of Two-Dimensional Arrays - Multi-dimensional arrays	T-204	PPT	2	0	1	3
12.	Dynamic Arrays - Character arrays and Strings	T-213	PPT	2	0	0	2
13.	Declaring and Initializing String Variables	T-235	PPT	2	0	0	2
14.	Reading Strings from Terminal	T-236	PPT	2	0	0	2
15.	Writing Strings to Screen	T-242	PPT	2	0	0	2
16.	Arithmetic Operations on Characters	T-246	PPT	2	0	0	2
17.	Putting Strings Together	T-248	PPT	2	0	0	2
18.	Comparison of Two Strings - String Handling Functions	T-249	PPT	2	0	0	2
UNIT - III							
19.	User defined Functions - Elements of user defined functions	T-267	PPT	2	0	1	3
20.	Definition of Functions	T-272	PPT	3	0	0	3
21.	Returning Values and Their Types - Function Calls - Function Declaration	T-274	PPT	2	0	0	2
22.	Categories of Functions – Recursion	T-278	PPT	2	0	0	2
23.	Structures and Unions: Defining a structure -	T-320	PPT	1	0	0	1
24.	Declaring Structure Variables - Accessing structure Members	T-322	PPT	1	0	0	1
25.	Array of Structures	T-329	PPT	1	0	0	1

26.	Arrays within Structures	T-332	PPT	2	0	1	3
27.	Structures within Structures - Union - Size of Structures.	T-333	PPT	1	0	0	1
UNIT - IV							
28.	Introduction - Understanding Pointers - Accessing the address of a variable	T-353	PPT	1	0	0	1
29.	Declaring Pointer Variables - Initialization of Pointer Variables	T-357	PPT	2	0	1	3
30.	Accessing a Variable through its Pointer - Chain of Pointers - Pointer Expressions - Pointer Increments and Scale Factors	T- 359	PPT	1	0	0	1
31.	Pointers and Arrays	T-364	PPT	1	0	0	1
32.	Pointer and character strings - Array of pointers	T -368	PPT	1	0	0	1
33.	Pointers and structures	T-377	PPT	1	0	1	2
34.	Dynamic memory allocation: malloc() - calloc ()	T-415	PPT	1	0	0	1
35.	free () - realloc()	T-419	PPT	1	0	1	2
UNIT - V							
36.	FILES: File Management in C: Defining and Opening a File	T-392	PPT	2	0	1	3
37.	Closing a File - I/O operations on Files	T-393	PPT	2	0	1	3
38.	Random Access to Files	T-402	PPT	2	0	0	2
39.	Command Line arguments	T-409	PPT	1	0	0	1
TOTAL							75

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Text Books

T1	Balagurusamy E(2017). <i>Programming in ANSI C</i> (7 th Edition). McGraw Hill Education (India) Private Limited.
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Reference Books

R1	Stephen, G. Kochan(2014). <i>Programming in C</i> (4 th Edition). Addison-Wesley Professional.
R2	Rajaraman, V(2006). <i>Computer Programming in C</i> . PHI, New Delhi.
R3	ReemaThareja(2011). <i>Programming in C</i> (1 st Edition) Oxford University Press.

Web Resources

W1	www.w3schools.com
W2	www.onlinegdb.com
W3	www.programiz.com

E – Books /Library INFLIBNET RESOURCES

E1	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/detail.action?docID=5121122
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Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	Algorithm, Flow chart	Taught through an example	2	HT

* *Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)*

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	Unit - 1	20%
2.	I INTERNAL	Unit - I, II, III (upto recursion)	50%
3.	II INTERNAL	Unit – III (from Structure) , IV, V	50%
4.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.S.Nirmala Devi		
Programme Coordinator	Mrs.S.Nirmala Devi		

	Approved by		
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Digital Principles & Computer Organization Course Code : 20CS104
Year / Semester : I / I Section: A & B Total No. of Students : 52
No of Credits : 5 Total No. of Contact Hours : 5
Course Teacher (s) Name : Mrs.N.Anuradha Corresponding lab Paper : No

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
1.	Introduction to computers & Logic gates – Introduction - Characteristics of computers	T1 - 1	PPT & GS	3	0	0	3
2.	Generations of computers - Classification of computers	T1 - 9	PPT & GS	3	0	0	3
3.	The computer system – Components of a computer system - Applications of computers	T1 - 19	PPT & GS	3	0	0	3

4.	Logic gates - Boolean Algebra	T1 – 65	PPT & GS	3	0	0	3
5.	Combination of logic gates	T1 - 74	PPT & GS	3	0	0	3
UNIT - II							
6.	Number System, Binary Encoding & Computer Architecture - Number System - Base or Radix of the system - Types of number system	T1 - 27	PPT & GS	3	0	0	3
7.	Conversion between number bases - Arithmetic system	T1 – 33	PPT & GS	3	0	0	3
8.	Signed and unsigned numbers - Binary coding	T1 – 55	PPT & GS	3	0	0	3
9.	Introduction to computer system - Central Processing Unit	T1 – 84	PPT & GS	3	0	0	3
10.	Main Memory Unit - Interconnection of units	T1 - 88	PPT & GS	3	0	0	3
UNIT - III							
11.	I/O Organizations - Accessing I/O devices	T2 – 204	PPT & GS	2	0	0	2
12.	Interrupts - Interrupt hardware	T2 – 208	PPT & GS	2	0	0	2

13.	Enabling and disabling interrupts - Handling multiple devices	T2 – 211	PPT & GS	4	0	0	4
14.	Controlling device request - DMA	T2 - 217	PPT & GS	3	0	0	3
15.	Buses - Synchronous bus - Asynchronous bus - Interface circuits - Parallel port - Serial port	T2 -240	PPT & GS	4	0	0	4
UNIT - IV							
16.	The Memory System - Basic concepts - Semiconductor RAM Memories	T2 – 291	PPT & GS	2	0	0	2
17.	Internal Organization of memory chips - Static memories - Asynchronous DRAMs - Synchronous DRAMs	T2 – 295	PPT & GS	2	0	0	2
18.	Structure of large memories. Read Only Memories – ROM – PROM – EPROM – EEPROM.	T2 - 305	PPT & GS	4	0	0	4
19.	Cache memories - Mapping Functions - Replacement Algorithm	T2 – 314	PPT & GS	3	0	0	3
20.	Virtual memories - Address translation	T2 - 337	PPT & GS	4	0	0	4
UNIT - V							
21.	Arithmetic Operations & Processing Unit - Design of Fast adders - Multiplication of positive numbers	T2 – 371	PPT & GS	2	0	0	2
22.	Booth algorithm - Integer division - Floating point numbers and	T2 - 380	PPT	2	0	0	2

	operations - IEEE Standard for floating point numbers		& GS				
23.	Arithmetic operations on floating point numbers. Basic Processing Unit - Fundamental concepts of processing unit	T2 – 398	PPT & GS	4	0	0	4
24.	Execution of a complete instruction - Hardwired control - Micro programmed control	T2 – 421	PPT & GS	3	0	0	3
25.	Microinstruction - Microprogram sequencing	T2 - 432	PPT & GS	4	0	0	4
Total							75

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open educational resources

(OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDo), and Google Slides(GS) and Whiteboards(WB),Wikipedia

(W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Text Books

T1	(2013). <i>Introduction to Computer Science</i> (2 nd Edition). ITL Education Solutions Limited, Pearson Publications
T2	CarlHamacher V, ZvonkoG.Vranesic, Safwat G. Zaky(2011). <i>Computer Organization</i> (5 th Edition). McGraw-Hill Publication

Reference Books

R1	Alexis Leon and Mathews Leon (1999). <i>Fundamentals of information Technology</i> , Leon Techworld Pub
R2	Jain, S K (1999). <i>Information Technology</i> “O” level made simple, BPB Pub
R3	Rajaraman, V. <i>Fundamentals of Computers</i> (5 th Edition). Prentice Hall India.
R4	(2005). <i>Introduction to Information Technology</i> . ITL Education Solutions Limited, Pearson Publications.

Web Resources

W1	https://www.javatpoint.com/digital-computers
W2	http://www.cuc.ucc.ie/CS1101/David%20Tarnoff.pdf
W3	https://vardhaman.org/wp-content/uploads/2019/10/Computer-Organization-and-Architecture.pdf

E – Books /Library INFLIBNET RESOURCES

E1	https://nlist.inflibnet.ac.in/search/Record/EBC5121168
E2	https://nlist.inflibnet.ac.in/search/Record/EBC5190778
E3	https://nlist.inflibnet.ac.in/search/Record/EBC231740
E4	https://nlist.inflibnet.ac.in/search/Record/EBC234972

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	Memory – Processor interaction	Processor Memory Interface is illustrated through ppt	1	HT

* *Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)*

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	1	Online Mode	PPT	Encoding scheme	1
2	2	Online Mode	PPT	Use of Hexdecimal & Octal number system in HTML Color coding & Unix File access permissions respectively	1

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage (to be decided by the Department)
1	CLASS TEST	Unit/Portion to be decided by the Course Teacher and the HoD	20%
2	I INTERNAL	UNIT - I, II, III (Half)	50%
3	II INTERNAL	UNIT – III (Half), IV, V	50%
4	Summative Examination	ALL FIVE UNITS	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.N.Anuradha		
Programme Coordinator	Mrs.S.Nirmala Devi		

Approved by				
	Name	Signature	Seal	Date
HoD				
Dean Academics				
Principal				

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Programming in C Lab

Course Code : 20CS106

Year / Semester : I / I

Section: NIL Total No. of Students :52

No of Credits : 2

Total No. of Contact Hours : 4

Course Teacher (s) Name : Mrs.S.Nirmala Devi

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
40.	Check whether the given number is Prime or not	NA	PPT, TC, OCC	0	0	2	2
41.	Check whether the given number is Adam Number or not	NA	PPT, TC, OCC	0	0	2	2
42.	. Check whether the given string is palindrome or not	NA	PPT, TC, OCC	0	0	2	2
43.	Find the LCM & GCD of given numbers.	NA	PPT, TC, OCC	0	0	2	2
44.	Sort the given N Number	NA	PPT, TC, OCC	0	0	2	2

45.	Arrange the given N Strings in Alphabetical order	NA	PPT, TC, OCC	0	0	2	2
46.	Search the given character is present in the string or not.	NA	PPT, TC, OCC	0	0	2	2
47.	Calculate the Electricity Bill for N customers	NA	PPT, TC, OCC	0	0	2	2
48.	Prepare Student Mark List for N students	NA	PPT, TC, OCC	0	0	2	2
49.	Perform the Matrix Addition for the given two matrices	NA	PPT, TC, OCC	0	0	2	2
50.	Perform the Matrix Multiplication for the given two matrices	NA	PPT, TC, OCC	0	0	2	2
51.	Find the NCR value using factorial as Recursive function	NA	PPT, TC, OCC	0	0	2	2
52.	Swap two numbers using call by reference	NA	PPT, TC, OCC	0	0	2	2
53.	Prepare the Student Mark List using Structure	NA	PPT, TC, OCC	0	0	2	2
54.	Prepare the Employee pay Bill using file	NA	PPT, TC, OCC	0	0	2	2
TOTAL							30

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) Turbo C (TC), Online C Compiler (OCC), Browser (B) any other tools may also be included

[Mark the abbreviation in the teaching aids column]

Text Book

T1	NA
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Reference Books

R1	NA
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R2	NA
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Web Resources

W1	www.w3schools.com
W2	www.onlinegdb.com
W3	www.programiz.com

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	Introduction to prime number, Adam number	Demo	2	HT

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	1 - 8 Programs	50%
2.	II INTERNAL	9 - 15 Programs	50%
3.	End Semester Examination	15 Programs	100%
Designation		Prepared by	
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.S.Nirmala Devi		
Programme Coordinator	Mrs.S.Nirmala Devi		

Approved by			
	Name	Signature	Date

HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme: B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : VALUE EDUCATION

Course Code : 20VE109

Year / Semester : I / I

Section: A & B

Total No. of Students : 52

No of Credits : 2

Total No. of Contact Hours :30

Course Teacher (s) Name : Mr. Perumal Kannan

Corresponding lab Paper : No

Sl. No.	TOPIC	Reference / Text Book_Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT I: INTRODUCTION TO VALUE EDUCATION							
1.	Objectives and components of value education — Human Values –			1			1
2.	Need for value education			1			2
3.	Significance and importance of value education			1			3
4.	Human Values			1			4
5.	Relation between moral values and religion			1			5

UNIT – II VALUE EDUCATION FOR NATION BUILDING

6.	National and constitutional values			1			6
7.	Categorization of values			1			7
8.	Environmental ethical values			2			9
9.	National integration			1			10
10.	Value seeds			1			11

UNIT III: HUMAN RIGHTS WITH INDIAN CONSTITUTION

11.	The concept of human rights – Universal declaration of human rights – Classification of human rights – social practice – Growth of fundamental rights in India – Human rights of Women and children – standard		W	1			12
12.	Universal declaration of human rights			1			13
13.	Classification of human rights			2			15
14.	social practice			1			16
15.	Growth of fundamental rights in India			2			18
16.	Human rights of Women and children			1			19

UNIT IV: MORAL VALUES, ETHICS AND GOOD MANNERS

17.	Moral values and Ethics – Social values – Spiritual values – Good manners –			1			20
18.	Social values			2			22
19.	Spiritual values			1			23

20.	Good manners			1			24
21.	Character Building			2			26
UNIT – V : <u>EIGHT LIMBS OF YOGA</u>							
22.	<u>Yamas</u> <u>Niyama</u> <u>Āsana</u> <u>Prānāyāma</u> <u>Pratyāhāra</u> <u>Dhāraṇā</u> <u>Dhyāna</u> <u>Samādhi</u>			4			30

Text Books

T1	
T2	
T3	
T4	

Reference Books

R1	
R2	
R3	
R4	

Web Resources

W1	
W2	
W3	
W4	

E – Books /Library INFLIBNET RESOURCES

E1	
E2	
E3	
E4	

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.				
2.				
3				

COURSE PLAN FOR CONTENT BEYOND SYLLABUS

Sl.NO	Module	Mode of delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1					
2					
3					

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage (to be decided by the Department)
	I INTERNAL	UNIT - I, II, III	50
	II INTERNAL	UNIT - III, IV, V	50
	Summative Examination	ALL FIVE UNITS	100

Designation	Prepared by		
	Name	Signature	Date

Course Coordinator / In-charge			
Module Coordinator (One person who would coordinate all Courses in a Programme according to OBE)			

Approved by			
	Name	Signature	Date
HoD			
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Java Programming

Course Code : 19CS301

Year / Semester : II / III

Section: NIL Total No. of Students :42

No of Credits : 4

Total No. of Contact Hours : 4

Course Teacher (s) Name : Mrs.J.Varalakshmi

Corresponding lab Paper : Yes

Sl. No.	TOPIC	Reference / Text Book_Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
1.	The Genesis of Java-Java's Lineage-The Creation of Java-Why Java is Important to the Internet-Java's Magic	T1-3	PPT	3	0	0	2
2.	The Java Buzzwords-The Continuing Revolution	T1-12	PPT	2	0	0	5
3.	An Overview of Java-Object Oriented Programming-Lexical Issues	T1-17	PPT	2	0	0	7
4.	Data Types , variables and arrays Operators	T1-41	PPT	2	0	0	9
5.	Control Statements-Java's selection statements-Iteration statements-Jump	T1-99	PPT	2	0	0	11

	statements						
UNIT – II							
6.	Introducing Classes-Class Fundamentals-Declaring Objects-Assigning Objects Reference Variables	T1-130	PPT	2	0	0	13
7.	Introducing Methods-Constructors-This Keyword	T1-138	PPT	2	0	0	15
8.	Garbage Collection-The Finalize() Method	T1-150	PPT	1	0	0	16
9.	Overloading Methods-Using Object as Parameters-Argument Passing -Returning Objects	T1-156	PPT	2	0	0	18
10.	Recursion-Introducing Access Control-Understanding Static-Introducing Final	T1-169	PPT	2	0	0	20
11.	Introducing Nested and Inner Classes-Command Line Arguments.	T1-181	PPT	1	0	0	21
12.	String Handling-String Constructors-Special String Operations-Character Extraction	T1-347	PPT	1	0	0	22
13.	Modifying A String-String Buffer	T1-363	PPT	1	0	0	23
UNIT - III							
14.	Inheritance-Inheritance Basics-Using Super	T1-189	PPT	2	0	0	25
15.	Multilevel Hierarchy-When Constructors Are Called-Method Overriding	T1-203	PPT	2	0	0	27
16.	Dynamic Method Dispatch	T1-211	PPT	1	0	0	28
17.	Using Final with Inheritance	T1-219	PPT	1	0	0	29
18.	The Object Class	T1-220	PPT	1	0	0	30
19.	Packages and Interfaces-Packages-Access Protection	T1-223	PPT	2	0	0	32
20.	Importing Packages-Interfaces.	T1-232	PPT	2	0	0	34
UNIT - IV							

21.	Exception Handling-Exception Handling Fundamentals	T1-250	PPT	2	0	0	36
22.	Exception Types-Uncaught Exceptions	T1-251	PPT	2	0	0	38
23.	Using Try And Catch-Multiple Catch Clauses-Nested Try Statements	T1-253	PPT	2	0	0	40
24.	Built In Exceptions-Creating own Exception Subclasses-Using Exceptions	T1-265	PPT	2	0	0	42
25.	Multithreaded Programming-The Java Thread Model	T1-273	PPT	1	0	0	43
26.	Main Thread-Creating a Thread -Creating Multiple Threads	T1-277	PPT	2	0	0	45
27.	Thread Priorities	T1-289	PPT	1	0	0	46
28.	Synchronization	T1-292	PPT	1	0	0	47
UNIT - V							
29.	Input / Output-Byte Streams – InputStream, OutputStream, FileInputStream & FileOutputStream	T1-314	PPT	2	0	0	49
30.	Character Streams – Reader, Writer, FileReader & FileWriter	T1-315	PPT	2	0	0	51
31.	The Applet Class-Applet Basics-Applet Skeleton	T1-627	PPT	1	0	0	52
32.	2.3 Display Methods-HTML Applet Tag-Passing Parameters To Applets	T1-636	PPT	2	0	0	54
33.	Using AWT Controls-Labels-Buttons	T1-735	PPT	2	0	0	56
34.	TextField-Applying CheckBoxes-CheckboxGroup	T1-758	PPT	1	0	0	57
35.	Swing-Labels-Text Fields	T1-921	PPT	2	0	0	59
36.	Buttons-Checkboxes -Radio buttons	T1-927	PPT	1	0	0	60
TOTAL							60

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Text Books

T1	The Complete Reference Java 2 , Patrick Naughton, Herbert Schildt, Tata McGraw Hill, Fifth
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Reference Books

R1	“Java: A Beginner's Guide”, Herbert Schildt, Mcgraw-Hill Osborne Media; 6th Edition, 2014
R2	“Beginning Programming with Java For Dummies”, Burd, Dummies, 4 th Edition, 2014

Web Resources

W1	www.w3schools.com
W2	https://www.javatpoint.com/java-tutorial
W3	https://www.tutorialspoint.com/java/index.htm
W4	https://www.guru99.com/java-tutorial.html
W5	https://www.programiz.com/java-programming

E – Books /Library INFLIBNET RESOURCES

E1	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=
E2	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=5050193&query=
E3	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.				

* *Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)*

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	UNIT-V	PPT	PPT	AWT event handling	2
2	UNIT-V	PPT	PPT	Swing event handling	2

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	Unit - I, II, III (2.5 UNITS)	50%
2.	II INTERNAL	Unit – III,IV,V(2.5 UNITS)	50%
3.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.J.Varalakshmi		
Programme Coordinator	Mrs.S.Nirmala Devi		

	Approved by		
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Computer Networks & Cryptography Course Code : 19CS302

Year / Semester : II / III Section: NIL Total No. of Students :42

No of Credits : 4 Total No. of Contact Hours : 4

Course Teacher (s) Name : Mrs.S.Nirmala Devi Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book_Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
1.	Introduction - Uses of Computer Networks - Network Hardware	T1-1	PPT	2	0	0	2
2.	Network Software - Reference Models - The OSI Reference Models	T1-29	PPT	2	0	0	2
3.	The TCP/IP Reference Models - Comparison of the OSI and TCP/IP Reference Models	T1-41	PPT	2	0	0	2
4.	Example Networks - The Internet - Third-Generation Mobile Phone Networks - Wireless LANs - RFID and Sensor Networks	T1-54	PPT	2	0	0	2

UNIT – II							
5.	The Transmission Media - Guided Transmission Media - Magnetic Media - Twisted Pairs	T1-95	PPT	2	0	0	2
6.	Coaxial Cable - Power Lines - Fiber Optics - Unguided Transmission Media - The Electromagnetic Spectrum	T1-97	PPT	2	0	0	2
7.	Radio Transmission - Microwave Transmission - Infrared Transmission - Light Transmission	T1-109	PPT	3	0	0	3
UNIT - III							
8.	Network Security Introduction: Computer Security Concepts - The OSI Security Architecture	T2-9	PPT	2	0	0	2
9.	Security Attacks - Security Services - Security Mechanism	T2-15	PPT	2	0	0	2
10.	A Model for Network Security - Symmetric Cipher Model	T2-25	PPT	2	0	0	2
11.	Substitution Techniques - Monoalphabetic Cipher	T2-38	PPT	2	0	0	2
12.	Playfair Cipher	T2-44	PPT	2	0	0	2
13.	One-Time pad	T2-52	PPT	2	0	0	2
14.	Transposition Techniques - Steganography	T2-53	PPT	2	0	0	2
UNIT - IV							
15.	Block Cipher & DES: Block Cipher Principles - Stream Cipher and Block Ciphers	T2-68	PPT	2	0	0	2
16.	The Data Encryption Standard - DES Encryption - DES Decryption	T2-77	PPT	2	0	0	2
17.	The Strength Of DES - The use of 56-bit Keys	T2-88	PPT	2	0	0	2
18.	The nature of DES Algorithm - Timing Attacks The Euclidean Algorithm - Modular arithmetic - Groups, Rings and Fields	T2-89	PPT	2	0	0	2

19.	Finite fields of the form GF(p) - Polynomial Arithmetic	T2-120	PPT	2	0	0	2
20.	Multiple Encryption and Triple DES - Double DES - Triple DES with Two Keys - Triple DES with Three Keys	T2-193	PPT	2	0	0	2
21.	Advanced Encryption Standard: AES Structure - General Structure - Detailed Structure	T2-148	PPT	2	0	0	2
22.	AES Transformation Functions - Substitute Bytes Transformation	T2-150	PPT	2	0	0	2
23.	Shift Rows Transformation – Mix Column Transformation	T2-155	PPT	2	0	0	2
UNIT - V							
24.	Public Key Cryptography& RSA: Public Key Cryptography And RSA : Principles of Public Key Cryptosystems - Public Key Cryptosystems	T2-266	PPT	2	0	0	2
25.	Applications for Public Key Cryptosystems - Requirements for Public Key Cryptosystems - Public Key Cryptanalysis	T2-269	PPT	2	0	0	2
26.	The RSA Algorithm - Description of the algorithm - Computational Aspects	T2-277	PPT	2	0	0	2
27.	Diffie-Hellman Key Exchange - Message Authentication: Authentication Requirements	T2-301	PPT	2	0	0	2
28.	Authentication functions : Message Encryption - Message Authentication Code	T2-362	PPT	2	0	0	2
29.	Digital Signature Standard: The DSS Approach - The Digital Signature Algorithm	T2-395	PPT	2	0	0	2
30.	Electronic Mail Security-Pretty Good Privacy - Firewalls: Firewall Design Principles	T2-567	PPT	1	0	0	1
TOTAL							60

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Text Books

T1	“Computer Networks” By Andrew S. Tanenbaum DavidJ.Wetherall 5 th Edition, Prentice Hall of India 2006.
T2	“Cryptography and Network Security”, William Stallings 5 th Edition, Pearson Education.

Reference Books

R1	Data Communications And Networking , Forouzan, TataMc-Graw Hill, 2013.
R2	Data And Computer Communications, WilliamStallings, Pearson Education, 9 th Edition,2013
R3	Data Communication & Networking, L.MathuKrithigaVenkatesh, Margham Publications, 2013.
R4	Computer Networks By Andrew S. Tanenbaum DavidJ.Wetherall 5 th Edition, Prentice Hall of India 2006.
R5	“Fundamentals of Network Security”, Eric Maiwal, McGraw Hill Publisher, 4th Edition.

Web Resources

W1	www.w3schools.com
W2	https://engineering.purdue.edu/kak/compsec/

E – Books /Library INFLIBNET RESOURCES

E1	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=
E2	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=5050193&query=
E3	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	III	online	PPT	Example for Caesar Cipher	01

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	Unit - I, II, III (upto model for network security)	50%
2.	II INTERNAL	Unit – III (from symmetric cipher model) , IV, V	50%
3.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.S.Nirmala Devi		
Programme Coordinator	Mrs.S.Nirmala Devi		

	Approved by		
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme: B.Sc., COMPUTER SCIENCE [SSS]

Title of the Course	: DATA STRUCTURES [ELECTIVE]	Course Code	: 19CS303
Year / Semester	: II/III	Section: A& B	Total No. of Students : 42
No of Credits	: 04		Total No. of Contact Hours : 60
Course Teacher (s) Name	: Dr. R. Parthiban		Corresponding lab Paper : No

Sl. No.	TOPIC	Text Book (T1) Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I							
1.	Introduction - Basic Terminology	1.1, 1.2	PPT	1	0		1
2.	Elementary Data Organization - Data Structures - Data Structure Operations.	1.2, 1.3, 1.4	PPT	3	0		3
3.	Preliminaries: Complexity of Algorithms - Other Asymptotic Notations for Complexity of Algorithms Ω , Θ , $^{\circ}$ - Sub algorithms.	2.5, 2.6, 2.7	PPT	4	0		4
4.	Arrays: Linear Arrays - Representation of linear arrays in Memory -	4.2,	PPT	4	0		4

	Traversing Linear Arrays.	4.3, 4.4					
UNIT – II							
5.	Stacks- Introduction - Array Representation of Stack	6.1, 6.2	PPT	3	0		3
6.	Arithmetic Expressions: Polish Notation - Quick Sort	6.5, 6.6	PPT	3	0		3
7.	An Application of Stacks – Recursion- Towers of Hanoi	6.7	PPT	3	0		3
8.	Queues - Dequeues - Priority Queues	6.10, 6.12, 6.13	PPT	3	0		3
UNIT – III							
9.	Introduction - Sorting	4.6, 9.1, 9.2	PPT	2	0		2
10.	Insertion Sort - Selection Sort	9.3, 9.4	PPT	3	0		3
11.	Merging - Merge Sort - Bubble Sort	9.5, 9.6, 4.6	PPT	4	0		4
12.	Searching : Linear Search - Binary Search	4.7, 4.8	PPT	3	0		3
UNIT – IV							
13.	Introduction - Linked List - Representation of linked list in Memory- Linked Representation of Stack - Linked Representation of Queues	5.1, 5.2, 5.3, 6.4,	PPT	4	0		4

		6.11					
14.	Traversing a Linked List - Searching a Linked List	5.4, 5.5	PPT	2	0		2
15.	Memory Allocation: Garbage Collection - Insertion into a Linked List - Deletion from a Linked List	5.6, 5.7 5.8	PPT	4	0		4
16.	Header Linked Lists - Two Way Lists	5.9, 5.10	PPT	2	0		2
UNIT – V							
17.	Introduction - Binary Trees - Representing Binary Trees in Memory - Traversing Binary Trees	7.1, 7.2, 7.3, 7.4	PPT	3	0		3
18.	Binary Search Trees - Searching and Inserting in Binary Search Trees	7.7, 7.8	PPT	3	0		3
19.	AVL Search Trees - Insertion in an AVL Search Tree - Deletion in an AVL Search Tree	7.10, 7.11, 7.12	PPT	3	0		3
20.	m-Way Search Trees - Searching, Insertion, Deletion In An m-Way Search Tree	7.13, 7.14	PPT	3	0		3

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open educational resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDo), and Google Slides(GS) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

COURSE PLAN FOR CONTENT BEYOND SYLLABUS ----NA---

SI.NO	Module	Lecture	Planned Topics	Date	Time	Total No of Hours Allotted
1	1	Lecture1				
2		Lecture2				
3	2	Lecture1				
4		Lecture 2				

Gaps in the Syllabus –To meet Industrial Requirements

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	Seven Assignments from the syllabus	Assignment	12	Evaluation Hours (12 hours)
		Seminar		
		Peer teaching		
		Industrial Visit		

Resources [Citation style differs for each Programme, Kindly use the citation style (APA, MLA etc) applicable for your domain. This has been advised by the University Nominees and Experts last time]

Text Books

T1	Seymour Lipchitz,” Data Structures”, McGraw Hill Education (India) Private Limited, Revised I Edition, 2010.
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Reference Books

R1	Reema Thareja , “Data Structures Using C “,Oxford 2 nd Edition , 2014.
R2	Sartaj Sahni , Susan Anderson-Freed , Ellis Horowitz , “Fundamentals of Data Structures in C”, Universities Press; Second edition, 2008.

Web Resources

W1	https://www.studytonight.com/data-structures
W2	http://icarus.cs.weber.edu/~dab/cs1410/textbook/7.Arrays/arrays.html
W3	https://people.ok.ubc.ca/ylucet/DS/StackArray.html
W4	https://www.geeksforgeeks.org/binary-tree-data-structure/

E – Books /Library INFLIBNET RESOURCES---NA-----

E1	
E2	
E3	
E4	

Topics beyond Syllabus----NA-----

Module 1	
M2	
M3	
M4	

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage (to be decided by the Department)
	SLIP / CLASS TEST	Unit/Portion to be decided by the Course Teacher and the HoD	-NA-
1	I INTERNAL	UNIT - I, II, III (half unit)	50
2	II INTERNAL	UNIT – III (half unit), IV, V	50
3	Summative Examination	ALL FIVE UNITS	100

ASSESSMENT METHODOLOGY – DIRECT

	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Internal Examination	Yes	Yes	Yes	Yes	Yes
Assignment	Yes	Yes	Yes	Yes	Yes

Slip Test / Class Test	-	-	-	-	-
Project	-	-	-	-	-
Summative Examination	Yes	Yes	Yes	Yes	Yes

Assessment Indirect

	Yes/No	Yes/No	Yes/No
Assessment of Course Outcome by Student Feedback			
Feedback from Alumni			
Feedback from Educational Experts			
Feedback from Parents			

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Dr. R.Parthiban		
Module Coordinator (One person who would coordinate all Courses in a Programme according to OBE)			

Approved by				
	Name	Signature	Seal	Date
HoD				
Dean Academics				
Principal				

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : JAVA PROGRAMMING LAB

Course Code : 19CS305

Year / Semester : II / III

Section: NIL Total No. of Students :42

No of Credits : 3

Total No. of Contact Hours : 6

Course Teacher (s) Name :Mrs.J.Varalakshmi

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
55.	Program using class & constructors	NA	PPT, NP, CP	0	0	2	2
56.	Program using method overloading	NA	PPT, NP, CP	0	0	2	4
1.	Program using constructor overloading	NA	PPT, NP, CP	0	0	2	6
1.	Program using static modifier & final modifier	NA	PPT, NP, CP	0	0	2	8

2.	Program using single inheritance	NA	PPT, NP, CP	0	0	1	9
3.	Program using multilevel hierarchy	NA	PPT, NP, CP	0	0	2	11
4.	Program using method overriding	NA	PPT, NP, CP	0	0	1	12
5.	Program using abstract classes	NA	PPT, NP, CP	0	0	1	13
6.	Program using Interface	NA	PPT, NP, CP	0	0	2	15
7.	Program using dynamic method dispatch	NA	PPT, NP, CP	0	0	1	16
8.	Program to create user defined package.	NA	PPT, NP, CP	0	0	2	18
9.	Program using exception handling	NA	PPT, NP, CP	0	0	2	20
10.	Program using built in exceptions	NA	PPT, NP, CP	0	0	2	22
11.	Program using user defined exceptions	NA	PPT, NP, CP	0	0	2	24
12.	Program using multithreading	NA	PPT, NP, CP	0	0	2	26
13.	Program using String class	NA	PPT, NP, CP	0	0	1	27
14.	Program using StringBuffer class	NA	PPT, NP, CP	0	0	2	29
15.	Program using File Stream Classes	NA	PPT, NP, CP	0	0	2	31
16.	Program using Applet class	NA	PPT, NP, CP	0	0	2	33
17.	Program to develop a GUI using AWT controls	NA	PPT, NP, CP	0	0	2	35
18.	Program to calculate total scores of a student using AWT button handling classes.	NA	PPT, NP, CP	0	0	2	37
19.	Program using JLabel, JTextField , JButton & JComboBox classes in	NA	PPT, NP, CP	0	0	2	39

	swing.						
20.	Program to implement DES cryptography algorithm.	NA	PPT, NP, CP	0	0	2	41
21.	Program to implement AES cryptography algorithm.	NA	PPT, NP, CP	0	0	2	43
22.	Program to implement RSA cryptography algorithm.	NA	PPT, NP, CP	0	0	2	45
TOTAL							45

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google

Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) , Notepad (NP) , Browser (B) Command Prompt(CP)

any other tools may also be included

[Mark the abbreviation in the teaching aids column]

Text Book

T1	NA
----	----

Reference Books

R1	NA
R2	NA

Web Resources

W1	https://www.w3schools.com
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W2	https://www.tutorialspoint.com
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E – Books /Library INFLIBNET RESOURCES

E1	
E2	
E3	
E4	

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
2.				

* *Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)*

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	1 - 7 Programs	50%
2.	II INTERNAL	8 - 16 Programs	50%
3.	End Semester Examination	16 Programs	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.J.Varalakshmi		
Programme Coordinator	Mrs.S.Nirmala Devi		

Approved by			
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : DHTML Lab

Course Code : 19CS306

Year / Semester : II / III

Section: NIL Total No. of Students :42

No of Credits : 2

Total No. of Contact Hours : 4

Course Teacher (s) Name : Mrs.S.Nirmala Devi

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
1.	CSS Basic: CSS Id & Class - CSS Styling - Styling Backgrounds - Styling Text, Styling Fonts	NA	PPT, NP, B	0	0	5	5
2.	Styling Links, Styling Lists, Styling Tables	NA	PPT, NP, B	0	0	5	5
3.	CSS Box Model - CSS Border, CSS Outline, CSS Margin, CSS Padding	NA	PPT, NP, B	0	0	4	4
4.	Operator and Expressions, Conditional statements	NA	PPT, NP, B	0	0	4	4

5.	Iteration statements, Array Processing, Functions	NA	PPT, NP, B	0	0	2	2
6.	Dialog box , Java script document object model	NA	PPT, NP, B	0	0	3	3
7.	Event handling - Window object - Document object	NA	PPT, NP, B	0	0	3	3
8.	Browser object , Form object, Navigator object	NA	PPT, NP, B	0	0	2	2
9.	Screen object, Built in object, User defined object, Cookies	NA	PPT, NP, B	0	0	2	2
TOTAL							30

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) , Notepad (NP) , Browser (B) any other tools may also be included

[Mark the abbreviation in the teaching aids column]

Text Book

T1	NA
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Reference Books

R1	NA
R2	NA

Web Resources

W1	https://www.w3schools.com
W2	https://www.tutorialspoint.com

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	1 - 7 Programs	50%
2.	II INTERNAL	8 - 16 Programs	50%
3.	End Semester Examination	16 Programs	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.S.Nirmala Devi		
Programme Coordinator	Mrs.S.Nirmala Devi		

	Approved by		
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc NETWORKING

Programme Code : NW1009

Title of the Course : Non Major Elective - Office Automation Lab-I Course Code : 19CS5307

Year / Semester : III / V Total No. of Students : 24

No of Credits : 2 Total No. of Contact Hours : 2

Course Teacher (s) Name : Mrs.V.Gayathri Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
<u>MS-Word</u>							
1.	To create an advertisement in Word.	NA	MS-Word	1	0	1	2
2.	To create a table with student details & calculate total.	NA	MS-Word	1	0	1	2
3.	To prepare resume	NA	MS-Word	1	0	2	3
4.	Picture insertion and alignment	NA	MS-Word	1	0	1	2

5.	Usage of bullets & numbering, Borders & shading , Drop cap	NA	MS-Word	1	0	1	2
6.	Prepare newspaper column, footer and header	NA	MS-Word	1	0	2	3
7.	Usage of spell checks, find and replace	NA	MS-Word	1	0	1	2
8.	To create template.	NA	MS-Word	1	0	1	2
<u>MS-Excel</u>							
9.	Usage of formulas and built in functions	NA	MS-Excel	1	0	2	3
10.	Describe the type of functions	NA	MS-Excel	1	0	1	2
11.	Data sorting	NA	MS-Excel	1	0	1	2
12.	Prepare a spread sheet to analyze the marks of the students of a class.	NA	MS-Excel	1	0	2	3
13.	Drawing charts	NA	MS-Excel	1	0	1	2
Total no of Hours							30

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Web Resources

W1	https://www.microsoft.com/en-in/microsoft-365/free-office-online-for-the-web
W2	https://www.inloox.com/products/business-productivity-tools/learning-about-microsoft-office/

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	Using Template for various Applications	Assignment		HT

* *Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)*

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	Power Point Presentation	Demo	PPT	How to create a simple Power Point Presentation	1

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	1 – 3 Experiments	20%
2.	I INTERNAL	4 - 7 Experiments	50%
3.	II INTERNAL	7 – 13 Experiments	50%
4.	Summative Examination	13 Experiments	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.S.Nirmala Devi		
Programme Coordinator	Mrs.S.Nirmala Devi		

Approved by			
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : PHP Programming

Course Code : 18CS501

Year / Semester : III / V

Section: A & B

Total No. of Students : 58

No of Credits : 4

Total No. of Contact Hours :

4

Course Teacher (s) Name : Mrs. N.Anuradha & Mrs.K.P.Maheswari

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book_Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I							
1.	Working of Framework - The Server side Architecture decomposed	T- 4 , T - 5	PPT	2	0	0	2
2.	Overview of PHP – PH P Origin - PHP revision History	T - 5, T- 6	PPT	2	2	0	4

3.	Benefits in running PHP as a server side script-Drawbacks in running PHP as a - Server side Script-What is PHP?-Why PHP?- Zend and PHP	T -12	PPT	3	0	0	3
4.	PHP & HTML - Getting Started PHP - Running PHP Script	T - 72	PPT	2	1	1	4
UNIT – II							
5.	BASICS OF PHP - Data types- Variables - Constants	T - 82	PPT	2	0	0	2
6.	Operators - Arrays	T - 98	PPT	2	2	1	5
7.	Conditional statements - Iterations - Looping	T-113	PPT	2	1	0	3
8.	FUNCTIONS - User Defined Functions - Built-In Functions	T-144	PPT	2	1	0	3
9.	Date and Time Functions - Mathematical Functions - String Functions	T-175	PPT	2	0	0	2
UNIT – III							
10.	FORMS - Form Elements - Adding elements to form	T-213	PPT	1	0	1	2
11.	Uploading files to web server	T-250	PPT	2	0	0	2
12.	Regular Expression Engine - Common uses of Regular Expressions	T-269	PPT	1	1	1	3
13.	Types of Regular Expressions - Regular Expression Functions	T-270	PPT	1	0	0	1
14.	Symbols used in Regular Expressions - Using Regular Expression Functions	T-272	PPT	1	0	0	1
UNIT – IV							
15.	TYPES OF ERRORS - Syntax or Parse Errors- Fatal Errors	T-306	PPT	2	0	0	2
16.	Warnings - Notices - Logical Errors	T-310	PPT	1	0	0	1
17.	Environmental Errors - Runtime Errors - Core Errors	T-315	PPT	1	0	0	1
18.	Compile Errors - User Defined Errors	T-316	PPT	2	0	0	2
19.	What is Log? - Using error_log()-Using trigger_error()	T-323	PPT	1	1	1	3

20.	COOKIES & SESSIONS- An introduction to cookies - Creating cookies- An introduction to sessions	T-822	PPT	1	0	1	2
UNIT – V							
21.	INTERACTION BETWEEN PHP AND MYSQL - The PHP Mysql Architecture - The PHP API	T-399	PPT	2	1	0	3
22.	Getting started- Creating MySQL DB table - Connecting to the MySQL Db Engine	T-402	PPT	2	0	0	2
23.	Selecting the database- Executing Commands - Inserting into a table, Extracting from a table, Updating - data in table, deleting data from table.- Closing the database connection	T-404	PPT	2	0	0	2
24.	The ODBC API - Interaction between PHP and database using ODBC - Getting Started – ODBC - Connecting to the Database	T-567	PPT	3	0	0	3
25.	Executing Commands – Inserting, Extracting, Updating & Deleting - Closing the Database Connection	T-569	PPT	1	1	0	2
TOTAL							60

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Text Book

T1	PHP 5.1 for Beginners, Ivan Bayross, Sharanam Shah, Shroff publishers & Distributors Pvt Ltd , 2010
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Reference Books

R1	Programming PHP , Kevin Tatroe, Peter MacIntyre, Rasmus Lerdorf, Orielly , 3 rd Edition, 2013
R2	Open Source Technology & Policy, Fadi P.Dezek, James A M McHugh,Cambridge University Press – 2007.

Web Resources

W1	https://www.w3schools.com
W2	https://www.tutorialspoint.com/php/index.htm
W3	https://www.javatpoint.com/php-tutorial
W4	https://www.tutorialrepublic.com/php-tutorial/

E – Books /Library INFLIBNET RESOURCES

E1	
E2	
E3	
E4	

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.				

* *Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)*

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
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1	3	Tutorial	PPT	Preg functions for Regular Expressions	1
2	4	Practical	Google Meet	Cookies creation and deletion in different browsers	1

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	Unit - 1	20%
2.	I INTERNAL	Unit - I, II, III (upto uploading files)	50%
3.	II INTERNAL	Unit – III (from Regular Expressions) , IV, V	50%
4.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge – A Section	Mrs.N.Anuradha		
Course Coordinator / In-charge – B Section	Mrs.K.P.Maheswari		
Programme Coordinator	Mrs.S.Nirmala Devi		

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Approved by			
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : CLOUD COMPUTING & SECURITY Course Code : 18CS502
Year / Semester : III / V Section: NIL Total No. of Students : 58
No of Credits : 4 Total No. of Contact Hours : 4
Course Teacher (s) Name : Mrs.J.Varalakshmi Corresponding lab Paper : NO

Sl. No.	TOPIC	Reference / Text Book_Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
1.	Overview of distributed computing-What is computing?-Computing paradigm trends	T1-1	PPT	2	0	0	2
2.	Computing Paradigm Evolution-Cloud computing –A New Paradigm	T1-15	PPT	1	0	0	3
3.	Introduction to cloud computing-Definition-Central ideas behind cloud computing	T1-27	PPT	1	0	0	4
4.	Properties and Characteristics of cloud computing	T1-30	PPT	1	0	0	5

5.	Benefits of cloud computing	T1-39	PPT	1	0	0	6
6.	Cloud service and Deployment Models	T1-47	PPT	1	0	0	7
7.	Service Models-Cloud providers-Cloud service Models	T1-47	PPT	1	0	0	8
8.	Organization Scenario of cloud: Cloud Deployment Model-Public cloud-Private cloud	T1-55	PPT	1	0	0	9
9.	Community cloud-Hybrid cloud	T1-57	PPT	1	0	0	10
10.	Cloud Architecture-Cloud Vocabulary	T1-58	PPT	1	0	0	11
11.	Challenges with cloud computing	T1-60	PPT	1	0	0	12
UNIT – II							
12.	Infrastructure service providers-Key benefits of cloud infrastructure services-Comparison between Infrastructure service providers-Cloud infrastructure setup procedure	T1-67	PPT	2	0	0	14
13.	Platform service providers-Key benefits of cloud platform services-Comparison of platform service providers-Cloud platform setup procedure	T1-74	PPT	2	0	0	16
14.	Software service providers-Benefits of SaaS-Comparison between software service providers	T1-82	PPT	2	0	0	18
15.	Cloud database-Operation model for cloud database-Types of cloud database	T1-89		2			20
16.	Cloud file system-Distributed file system basics	T2-90	PPT	2	0	0	22
17.	Concept of GFS-Concept of HDFS	T1-92	PPT	1	0	0	23
18.	Cloud programming Model-Understanding Map Reduce programming-Operation using Map Reduce programming	T1-98	PPT	1	0	0	24

UNIT - III							
19.	Virtualization technology-Implementation Levels of Virtualization	T1-101	PPT	2	0	0	26
20.	Virtualization structure-Overview of x86 virtualization	T1-104	PPT	1	0	0	27
21.	Types of virtualization-CPU virtualization-Memory virtualization-Device and I/O virtualization	T1-105	PPT	2	0	0	29
22.	OS-level virtualization-Network virtualization-Server virtualization-client virtualization-Application virtualization	T1-101	PPT	2	0	0	31
23.	Virtualization products-Category of virtualization products-VMware server-Benefits of VMware server	T1-117	PPT	2	0	0	33
24.	Concept of VLAN and benefits-Concept of SAN and benefits	T1-118	PPT	2	0	0	35
25.	VM Migration-VM Consolidation and Management	T1-122	PPT	1	0	0	36
UNIT - IV							
26.	Concept and need of cloud middleware	T1-145	PPT	2	0	0	38
27.	QoS Issues in cloud	T1-147	PPT	2	0	0	40
28.	Data Migration and Streaming in cloud	T1-149	PPT	2	0	0	42
29.	Private cloud computing platforms-Eucalyptus	T1-161	PPT	1	0	0	43
30.	Open Nebula-Nimbus	T1-163	PPT	2	0	0	45
31.	OpenStack-CloudStack	T1-169	PPT	2	0	0	47
32.	Cloud-Optimized Linux-Testing in cloud computing	T1-170	PPT	1	0	0	48
UNIT - V							
33.	Cloud Security Fundamentals	T2-175	PPT	1	0	0	49

34.	Cloud Risk-Cloud risk division	T2-180	PPT	2	0	0	51
35.	Cloud computing security architecture	T2-182	PPT	1	0	0	52
36.	VM Security challenges	T2-184	PPT	1	0	0	53
37.	Vulnerability Assessment Tools	T2-186	PPT	2	0	0	55
38.	Open source security solution products in cloud	T2-188	PPT	1	0	0	56
39.	Host security in the cloud	T2-190	PPT	2	0	0	58
40.	Data security in the cloud	T2-195	PPT	2	0	0	60
TOTAL							60

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Text Books

T1	”Cloud computing Fundamentals, Industry Approach and Trends”, Rishabh Sharma, Wiley India Pvt.Ltd, First Edition, 2015
T2	“Cloud Computing Black Book,” Kailash Jayaswal, Jagannath Kallakurhi, Donald J.Houde, Dr.Deven Shah ,Publisher: DreamTech Press - 2016

Reference Books

R1	Cloud Computing: Concepts, Technology & Architecture, Thomas Erl, Ricardo Puttini, Zaigham Mahmood, Prentice Hall Publication, 2013.
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R2	Guide to Cloud Computing: Principles and Practice, Richard Hill, Laurie Hirsch, Peter Lake, Siavash Moshiri, Springer, 2013.

Web Resources

W1	https://aws.amazon.com
W2	https://azure.microsoft.com/en-in/overview/what-is-cloud-computing/
W3	https://www.zdnet.com/article/what-is-cloud-computing-everything-you-need-to-know-about-the-cloud/
W4	https://www.investopedia.com/terms/c/cloud-computing.asp

E – Books /Library INFLIBNET RESOURCES

E1	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=
E2	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=5050193&query=
E3	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	Unit - I, II, III (2.5 UNITS)	50%
2.	II INTERNAL	Unit – III,IV,V(2.5 UNITS)	50%
3.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.J.Varalakshmi		
Programme Coordinator	Mrs.S.Nirmala Devi		

Approved by			
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Program Code : CS1002

Title of the Course : Cyber Forensics

Course Code : 18CS503

Year / Semester : III / V

Section: A & B Total No. of Students : 58

No of Credits : 4

Total No. of Contact Hours : 4

Course Teacher (s) Name : Mrs.V.Gayathri

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book_Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
	Understanding the Digital Forensics Profession and Investigations- An Overview of Digital Forensics- A Brief History of Computer Forensics , Understanding Case Law, Developing Computer Forensics Resources	T-2 to 9	PPT	1	0	0	1
1.	Preparing for Digital Investigations - Understanding Law Enforcement Agency Investigations, Following the Legal Processes	T-11 to 13	PPT	1	0	0	2
2.	Understanding Private Sector Investigations - Establishing Company Policies, Displaying Warning Banners , Designating an Authorized	T-15 to	PPT	1	1	0	2

	Requester, Distinguishing Personal and Company Property Preparing a Digital Forensics Investigation - An Overview of a Computer Crime and Policy Violation	24					
3.	Taking a Systematic Approach -Assessing the Case , Planning Your Investigation , Securing Your Evidence	T-25	PPT	1	0	1	2
4.	Procedures for Private Sector High-Tech Investigations - Employee Termination Cases, Internet Abuse Investigations , E-mail Abuse Investigations, Attorney-Client Privilege Investigations , Industrial Espionage Investigations	T- 32	PPT	1	0	1	2
5.	Conducting an Investigation - Gathering the Evidence , Understanding Bit-stream Copies	T- 41	PPT	1	0	0	1
UNIT - II							
6.	Data Acquisition - Understanding Storage Formats for Digital Evidence- Raw Format , Proprietary Formats ,Advanced Forensic Format	T- 93	PPT	1	1	0	2
7.	Determining the Best Acquisition Method	T- 97	PPT	1	0	0	1
8.	Contingency Planning for Image Acquisitions	T- 99	PPT	1	0	0	1
9.	Validating Data Acquisitions- Linux Validation Methods, Windows Validation Methods	T- 121 to 124	PPT	1	0	0	1
10.	Performing RAID Data Acquisitions- Understanding RAID , Acquiring RAID Disks	T- 125	PPT	1	1	0	2
11.	Using Remote Network Acquisition Tools -Remote Acquisition with ProDiscover ,Remote Acquisition with EnCase Enterprise ,Remote Acquisition with R-Tools R-Studio, Remote Acquisition with F-Response, Remote Acquisition with Runtime Software	T- 129	PPT	1	1	0	2
12.	Processing Crime and Incident Scenes- Identifying Digital Evidence, Understanding Rules of Evidence	T- 143	PPT	2	0	0	2

13.	Collecting Evidence in Private-Sector Incident Scenes	T- 153	PPT	1	0	0	1
14.	Processing Law Enforcement Crime Scenes- Understanding Concepts and Terms Used in Warrants	T- 158	PPT	1	0	0	1
15.	Preparing for a Search - Identifying the Nature of the Case , Identifying the Type of Computing System , Determining Whether You Can Seize a Computer, Obtaining a Detailed Description of the Location, Determining Who Is in Charge ,Using Additional Technical Expertise ,Determining the Tools You Need , Preparing the Investigation Team	T- 160	PPT	1	1	0	2
16.	Seizing Digital Evidence at the Scene - Preparing to Acquire Digital Evidence, Processing an Incident or Crime Scene , Using a Technical Advisor, Documenting Evidence in the Lab, Processing and Handling Digital Evidence	T- 167	PPT	1	1	0	2
17.	Storing Digital Evidence - Evidence Retention and Media Storage Needs, Documenting Evidence	T- 174	PPT	1	1	0	2
UNIT - III							
18.	Working with Windows and CLI Systems- Understanding File Systems- Understanding the Boot Sequence , Understanding Disk Drives	T- 195	PPT	1	0	0	1
19.	Exploring Microsoft File Structures - Disk Partitions , Examining FAT Disks	T- 201	PPT	1	0	1	2
20.	Examining NTFS Disks - NTFS System Files, NTFS Data Streams , Deleting NTFS Files	T- 212	PPT	0	1	1	2
21.	Understanding Whole Disk Encryption - Examining Microsoft BitLocker, Examining Third-Party Disk Encryption Tools	T- 235	PPT	0	1	0	1
22.	Current Digital Forensics Tools - Evaluating Computer Forensics Tool Needs, Types of Computer Forensics Tools- Hardware Forensic Tools, Software Forensic Tools	T- 267	PPT	1	0	0	1
23.	Tasks Performed by Computer Forensics Tools	T- 270	PPT	1	0	0	1
24.	Validating and Testing Forensics Software - Using National Institute of Standards and Technology (NIST) Tools , Using Validation Protocols	T- 290	PPT	1	0	0	1

UNIT - IV							
25.	Recovering Graphics Files- Recognizing a Graphics File , Understanding Bitmap and Raster Images, Understanding Vector Graphics, Understanding Metafile Graphics, Understanding Graphics File Formats, Understanding Digital Camera File Formats	T- 339	PPT	1	0	1	2
26.	Understanding Data Compression - Lossless and Lossy Compression	T- 347	PPT	1	0	0	1
27.	Locating and Recovering Graphics Files - Identifying Graphics File Fragments, Repairing Damaged Headers. Understanding Copyright Issues with Graphics	T- 348 T-349 T-367	PPT	1	0	1	2
28.	Digital Forensics Analysis and Validation - Determining What Data to Collect and Analyze, Approaching Computer Forensics Cases.	T- 377	PPT	1	0	0	1
29.	Addressing Data-Hiding Techniques- Hiding Partitions ,Marking Bad Cluster, Bit-Shifting , Using Steganography to Hide Data, Examining Encrypted Files, Recovering Passwords	T- 395	PPT	2	1	0	3
30.	Network Forensics, and Live Acquisitions - Network Forensics Overview- Securing a Network , Developing Standard Procedures for Network Forensics	T- 435	PPT	1	0	1	2
31.	Performing Live Acquisitions- Performing a Live Acquisition in Windows	T- 434	PPT	1	0	0	1
UNIT - V							
32.	E-mail and Social Media Investigations- Exploring the Role of E-mail in Investigations	T- 453	PPT	1	0	0	1
33.	Investigating E-mail Crimes and Violations-Examining E-mail Messages ,Viewing E-mail Headers , Examining E-mail Header, Examining Additional E-mail Files, Tracing an E-mail Message, Using Network E-mail Logs,	T- 457	PPT	1	0	1	2
34.	Applying Digital Forensics Methods to Social Media Communications.	T-480	PPT	1	0	0	1
35.	Mobile Device Forensics and the Internet of Anything- Understanding Mobile Device Forensics -Mobile Phone Basics,	T- 493	PPT	1	0	0	1

	Inside Mobile Devices						
36.	Understanding Acquisition Procedures for Mobile Devices - Mobile Forensics Equipment	T- 500	PPT	1	0	0	1
37.	Understanding Forensics in the Internet of Anything	T- 510	PPT	1	0	0	1
38.	Report Writing for High-Tech Investigations- Understanding the Importance of Reports- Limiting a Report to Specifics, Types of Reports	T- 561	PPT	1	0	0	1
39.	Guidelines for Writing Reports -What to Include in Written Preliminary Reports , Report Structure, Writing Reports Clearly	T- 565	PPT	1	0	1	2
Total no of Hours							60

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Text Book

T1	Bill Nelson, Amelia Phillips, Christopher Steuart (2019). Guide to Computer Forensics and Investigations (6 th Edition). Course Technology, Cengage Learning.
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Reference Books

R1	Albert J. Marcella (2010).Cyber Forensics: A Field Manual for Collecting, Examining, and Preserving Evidence of Computer Crimes(2 nd Edition), CRC Press.
R2	Albert J. Marcella and Frederic Guillosoou (2012).Cyber Forensics: From Data to Digital Evidence.John Wiley & Sons

Web Resources

W1	https://www.coursera.org/lecture/regtech/3-4a-digital-forensics-electronic-evidence-discovery-part-1-DLy4o
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E – Books /Library INFLIBNET RESOURCES

E1	https://nlist.inflibnet.ac.in/search/Record/978-0-387-24230-9
E2	https://nlist.inflibnet.ac.in/search/Record/EBC822015
E3	https://nlist.inflibnet.ac.in/search/Record/EBC694238

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1	Linux Acquisition Techniques	Assignment	1	HT
2	NTFS Data Streams	Demo	1	HT

* *Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)*

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

SI.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	Unit 1	Assignment	Google Meet	Types of Evidence Form	HT
2	Unit 2	Assignment	Google Meet	Evidence Custody Form	HT

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	Unit - 1	20%
2.	I INTERNAL	Unit - I, II, III (upto -----)	50%
3.	II INTERNAL	Unit – III (from -----) , IV, V	50%
4.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.S.Nirmala Devi		
Programme Coordinator	Mrs.S.Nirmala Devi		

Approved by			
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Program Code : CS1002

Title of the Course : Cyber Forensics Lab

Course Code : 18CS504

Year / Semester : III / V

Section: A & B Total No. of Students : 58

No of Credits : 3

Total No. of Contact Hours : 6

Course Teacher (s) Name : Mrs.V.Gayathri

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book_Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
1.	Understanding Hard Disks and File Systems	NA	PPT , Disk Genius	0	0	5	5
2.	Windows Forensics	NA	PPT ,Live Demo – Registry, Event Logs	0	0	5	5
3.	Data Acquisition and Duplication	NA	PPT, Access Data FTK	0	0	5	5

4.	Recovering Deleted Files and Partitions	NA	PPT, Pro discover ,Recuva	0	0	5	5
5.	Forensics Investigation Using AccessData FTK	NA	PPT, Video demo	0	0	5	5
6.	Converting a target drive in Linux as Windows	NA	PPT , Video Demo,	0	0	5	5
7.	Steganography and Image File Forensics	NA	PPT , Video Demo, stego tool	0	0	5	5
8.	Application Password Crackers	NA	PPT ,Wire shark ,Hex Editor	0	0	5	5
9.	Forensic investigation using HEX editors	NA	PPT ,Win hex	0	0	5	5
10.	Network Forensics, Investigating Logs and Investigating Network Traffic	NA	PPT ,Network Minner, Fast resolver,netstat, Acunetix,trip wire	0	0	5	5
11.	Investigating Wireless Attacks	NA	PPT , Video demo	0	0	5	5
12.	Tracking & Investigating Email Crimes	NA	PPT ,Pfogsumm	0	0	5	5
13.	Mobile Forensics	NA	PPT ,Auto Psy,FTK	0	0	5	5
14.	Investigative Reports preparation	NA	PPT ,Pro discover	0	0	5	5
Total no of Hours							70

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Web Resources

W1	https://www.guru99.com/computer-forensics-tools.html
W2	https://resources.infosecinstitute.com/topic/7-best-computer-forensics-tools/

E – Books /Library INFLIBNET RESOURCES

E1	https://nlist.inflibnet.ac.in/search/Record/EBC822015
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Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	Digital watermarking	Demo	2	HT
2	Acquisition using dd and dcfldd	Demo	1	HT

* *Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)*

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

SI.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	Expriment no 8	Demo	PPT	Cracking password using Wireshark	2

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	1 – 3 Experiments	20%
2.	I INTERNAL	4 - 7 Experiments	50%
3.	II INTERNAL	7 – 14 Experiments	50%
4.	Summative Examination	14 Experiments	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.S.Nirmala Devi		
Programme Coordinator	Mrs.S.Nirmala Devi		

	Approved by		
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : PHP Programming Lab

Course Code : 18CS505

Year / Semester : III / V

Section: A & B

Total No. of Students : 58

No of Credits : 3

Total No. of Contact Hours :

6

Course Teacher (s) Name : Mrs. N.Anuradha & Mrs.K.P.Maheswari

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book_Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I							
57.	Program to implement Echo Statement in PHP.	NA	PPT, WS, NP, B	0	0	5	5
58.	Program to implement Echoing Variables in PHP.	NA	PPT, WS, NP, B	0	0	5	5
59.	Program using Operators in PHP.	NA	PPT, WS, NP, B	0	0	5	5

60.	Program to implement Arrays in PHP.	NA	PPT, WS, NP, B	0	0	5	5
61.	Program to implement Functions in PHP.	NA	PPT, WS, NP, B	0	0	4	4
62.	Program to implement Date and Time Formats in PHP.	NA	PPT, WS, NP, B	0	0	5	5
63.	Program to create Forms in PHP.	NA	PPT, WS, NP, B	0	0	4	4
64.	Program to implement Regular Expressions in PHP.	NA	PPT, WS, NP, B	0	0	4	4
65.	Program to implement Include.	NA	PPT, WS, NP, B	0	0	4	4
66.	Program to implement Require.	NA	PPT, WS, NP, B	0	0	4	4
67.	Program to create Cookies in PHP.	NA	PPT, WS, NP, B	0	0	5	5
68.	Program to create Sessions in PHP .	NA	PPT, WS, NP, B	0	0	5	5
69.	Database – MySQL ,Tables implementation in PHP.	NA	PPT, WS, NP, B	0	0	5	5
70.	Program to perform CRUD Operations using Mysql in PHP.	NA	PPT, WS, NP, B	0	0	5	5
71.	Program to implement ODBC in PHP.	NA	PPT, WS, NP, B	0	0	5	5
TOTAL							70

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google

Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) ,XAMPP Web Server (WS), Notepad (NP) , Browser

(B) any other tools may also be included

[Mark the abbreviation in the teaching aids column]

Text Book

T1	NA
----	----

Reference Books

R1	NA
R2	NA

Web Resources

W1	https://www.w3schools.com
W2	https://www.tutorialspoint.com/php/index.htm
W3	https://www.javatpoint.com/php-tutorial
W4	https://www.tutorialrepublic.com/php-tutorial/

E – Books /Library INFLIBNET RESOURCES

E1	
E2	
E3	
E4	

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
3.	Online PHP Tools	Demo	2	HT
2.	Websserver (XAMPP)	Demo	2	HT
3.	MYSQL Environment	Demo	1	HT

* *Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)*

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	1	Practical	Google Meet	MYSQLi	1

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	1 – 4 Programs	20%
2.	I INTERNAL	5 - 10 Programs	50%
3.	II INTERNAL	10 - 15 Programs	50%
4.	End Semester Examination	15 Programs	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge – A Section	Mrs.N.Anuradha		
Course Coordinator / In-charge – B Section	Mrs.K.P.Maheswari		
Programme Coordinator	Mrs.S.Nirmala Devi		

Approved by			
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Computer Graphics Lab

Course Code : 18CS508

Year / Semester : III / V

Section: A & B Total No. of Students :58

No of Credits : 2

Total No. of Contact Hours : 2

Course Teacher (s) Name : Mrs.S.Nirmala Devi

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book_Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
72.	Draw a Line, Circle and Rectangle (Simple Programs), Draw a House,	NA	PPT, TC, AP, B	0	0	5	5
73.	Display National Flag waving - Car Moving	NA	PPT, TC, AP, B	0	0	5	5
74.	Draw a Line using DDA Algorithm - Draw a Line using Bresenham Algorithm - Draw a Circle using Mid Point Algorithm	NA	PPT, TC, AP, B	0	0	4	4

75.	2D Translation, Rotation and Scaling	NA	PPT, TC, AP, B	0	0	4	4
76.	Working with vector shapes and bitmaps - Working with Clone Tool	NA	PPT, TC, AP, B	0	0	4	4
77.	Implement Lasso tools on Images - Working with Selections, Layer basics, Masks & Channels	NA	PPT, TC, AP, B	0	0	3	3
78.	Working on how to perform Retouching & repairing - Working with Basic Pen Tool techniques, Vector masks, paths & shapes	NA	PPT, TC, AP, B	0	0	3	3
79.	Creating a banner for college advertisement using filters and effects	NA	PPT, TC, AP, B	0	0	2	2
TOTAL							30

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) Turbo C (TC), Adobe Photoshop (AP), Browser (B) any other tools may also be included

[Mark the abbreviation in the teaching aids column]

Text Book

T1	NA
----	----

Reference Books

R1	NA
R2	NA

Web Resources

W1	https://www.w3schools.com
----	---

W2	https://www.javatpoint.com/computer-graphics-programs
W3	https://photoshopcafe.com/photoshop-2020-upgrade-new-features-use/

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
4.	Adobe Photoshop Tools	Demo	2	HT

* *Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)*

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	1	Practical	Google Meet	New Tools updated in Adobe Photoshop 2020	1

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	1 - 8 Programs	50%
2.	II INTERNAL	9 - 15 Programs	50%
3.	End Semester Examination	15 Programs	100%

Designation	Prepared by		
	Name	Signature	Date

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

Course Coordinator / In-charge	Mrs.S.Nirmala Devi		
Programme Coordinator	Mrs.S.Nirmala Devi		

Approved by			
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : All First Year (Except F&IS)

Title of the Course : TAMIL **Course Code:** 20UT101

Year / Semester: 2020-2021/1 **Section:** **Total No. of Students: 51**

No.Of Credits: 3 **Total no. of Contact hours:50**

S. No	Topic	Reference / text Book Page No.	Teaching Aids	Mode of Delivery No. of Hours			Cummulative Hours
				L	T	P	
Unit I							
1	□□□□□□□□ - □□□□□□□□□□□□ □□□□□□□□□□ - □□□□□□□□□□□.	R1-1,2/R2- 154/R3-74	BB	2	2		4
2	□□□□□□□□ □□□□□□ - □□□□□□ □□□□□. □□□□□□ □□□□□□ □□□□□□□□ □□□□□□ - □□□□□□□□.	R1- 5,6/ R3-50 /R4- 68	BB	2	2		4
3	□□□□□□□□□□ - □□□□□□□□ □□□□□□ □□□□□□□□.	R1-6/ R5 - 1	BB	1	1		1
Unit II							

4	□□□□ - □□□□□□ □□□□□, □□□□□.	R1-7/R6 - 13/48		1	1		2
5	□□□□□□□ □□□□□□□ - □□□□□□□□□□ □□□□□□□□(□□□□□ □□□□□□□□□);).	R1-8/ R7-26	BB	1	1		2
6	□□.□□□□□□□- □□□□□□□□□□□□ □□□□□ (□□□□□□□□□□ □□□□□□□□).	R1-10/ R8- 99	BB	1	1		2
7	□□□□□□□□□□-□□□□□ □□□□□□□□□□□□ (□□□□□□□ □□□□□□□ □□□□□□□□□□□□□).	R1-8/ R9-121	BB	1	1		2
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Unit III							
9	□□□□□□□□□□□□□□□□□- □□□□□□□□□□□□□□□□□.	R1-22/R11- 29	BB	1	1		2
10	□□□□□□□□□□□- □□□□□□□□□□.	R1-41/R12-61	BB	1	1		2

11	□□□□□-□□□□□□□□	R1-22/ R 13-47	BB	1	1		2
12	□□□.□□□.□□□□□□□□- □□□□□□□□□□□□□□□□ □□□□□□□□□□□□.	R1-29/R12-92	BB	1	1		2
13	□□□□□□□□.□□□□□□□□□ - □□□□□□□□□.	R1-66/ R12 -60	BB / PPT	1	1		1
Unit IV							
14	செய்துள்ள □□□□□□□□□□, ல எழுது □□□□□□□□□□, ர-ற □□□□□□□□□□.;	R1-76/R14-236	BB	2	2		4
15	□□□□□□□□□□ □□□□□□□□□□ - □□□□□□□□□□ □□□□□□ □□□□□□□□, □□□□□□□□□□ □□□□□ □□□□□□□□.	R1-79/ R14 -264	BB	2	2		4
16	□□□□□□□□□□ □□□□□□□□ - □□□□□□□□□□□□, □□□□□□□□□□□□□□, □□□□□□□□□□□□□□□□□□, □□□□□□□□, □□□□□□□□ □□□□□□□□ □□□□□□□□□□ □□□□□□□□□□, □□□□□□□□□□□□ □□□□□□□□□□	R1-84/R14 -403	BB	1	1		1
Unit -V							

17	□□□□□□□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□□□□□	R1-91/R15-258	BB	1	1		2
18	□□□□□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□□□□□	R1-95/ R16-423	BB	1	1		2
19	□□□□□□□□□□□□□□ (□□□□□□□□□□□□ □□□□□□□□).	gilg;ghw;wy;	BB	3	3		5

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(Ws) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open educational resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDo), and Google Slides(GS) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.
[Mark the abbreviation in the teaching aids column]

COURSE PLAN FOR CONTENT BEYOND SYLLABUS

Sl.NO	Module	Lecture	Planned Topics	Date	Time	Total No of Hours Allotted
1	1	Lecture1	□□□□□□□□□□□□□□ □□□□□□□□□□			
2		Lecture2	□□□□□□□ □□□□□□□□			
3	2	Lecture1	□□□□□□□□ □□□□□□□□□;			

Gaps in the Syllabus –To meet Industrial Requirements

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) /
				Hours beyond the Time Table (HB)
1	□□□□□□ □□□□□□□□	Assignment		3
2	□□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□□□	Seminar	3	
3	□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□□□□□□□	Peer teaching	2	

Resources [Citation style differs for each Programme, Kindly use the citation style (APA, MLA etc) applicable for your domain. This has been advised by the University Nominees and Experts last time]

Reference Books

R1	□□□□□□ □□□□□□ -1 – □□□□□□□□ □□□□□□□□ – □□□□□□□□□□ □□□□□□□□□□ □□□□□□□□.					
R2	□□□□□□□□□□. □□□□□□□□□□ □□□□□□□□□□. □□□□□□: □□□□□□□□□□ □□□□□□□□□□, 1920. Print.					
R3	□□□□□□□□□□. □□□□□□□□□□ □□□□□□□□□□. □□□□□□□□: □□□□ □□□□□□□□□□□□□□□□, □□□□□□□□□□ □□□□□□□□□□,					

	1993. Print.				
R4	□□□□□□□□ □□□□□□. □□□□□□□□ □□□□□□ □□□□□□□□. □□□□□□: □□□□□□□□ □□□□□□□□, 1995 Print.				
R5	□□□□□□ □□□□□□ □□□□□□□□ □□□□□□. □□□□□□□□. □□□□□□: □□□□□□□□□□ □□□□□□□□, 1995 Print.				
R6	□□□□□□□□□□. L#□□□□□□ □□□□□□□□□□. □□□□□□: □□□□□□□□□□ □□□□□□□□□□, 1997 Print.				
R7	□□□□. □□□□□□□□.				
	□□□□□□□□□□: □□□□□□				
	□□□□□□□□□□, 1996. Print.				
R8	□□□□□□□□□□□□□□□□. □□□□□□□□□□□□□□□□. □□□□□□: □□□□□□ □□□□□□□□□□□□, 2002. Print.				
R9	□□.□□□□□□□□. □□□□□□□□□+□□□□□□. □□□□□□: □□□□□□ □□□□□□□□□□, 2009. Print.				
R10	□□□□□□□□□□□□. □□□□□□ L#□□□□□□ □□□□□□□□□□□□□□□□. □□□□□□: □□□□□□□□ □□□□□□□□, 2007. Print.				
R11	□□□□□□□□□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□□□. □□□□□□: □□□□□□□□□□□□□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□□□□□□□□□. 2002Print.				
R12	□□□□□□□□□□□□□□. □□□□.□□□□□□□□. □□□□□□□□□□□□□□□□□ □□□□□□□□□□ □□□□□□□□. □□□□□□: □□□□□□□□□□ □□□□□□□□ □□□□□□□□, 2012Print.				
R13	□□□□□□□ □□□□□□□□□□□□ □□□□□□□□□□□□□□. □□□□□□: □□□□□□□□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□□□□□□□□□, 2002Print.				
R14	□□.□□□□□□□□□□. □□□□□□ □□□□□□□□□□□□ □□□□□□□□. □□□□□□: □□□□□□□□□ □□□□□□ □□□□□□□□, 2007. Print.				
R15	अ□□□□.□□□□□□□□□□□□□□□□. □□□□□ □□□□□ □□□□□ □□□□□□□□□□? □□□□□□□□: □□□□□□□□□□□□□□, 1999. Print.				
R16	□□□□□□□□□□□□□□□□. □□□□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□□□□. □□□□□□□□□□□□□□: □□□□□□□□ □□□□□□□□□□□□□□, 1999. Print.				
	□□.□□□□□□□□□□. □□□□□□ □□□□□□□□ □□□□□□□□. □□□□□□□□: □□□□□□□□□□ □□□□□□□□. 2015 Print.				

E – Books /Library INFLIBNET RESOURCES

E1	
E2	
E3	

E4	
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Topics beyond Syllabus

Module 1	
M2	NA
M3	NA
M4	NA

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage (to be decided by the Department)
	SLIP / CLASS TEST	Unit/Portion to be decided by the Course Teacher and the HoD	15%
	I INTERNAL	UNIT - I, II, V	50%
	II INTERNAL	UNIT - III, IV, V	50%
	Summative Examination	ALL FIVE UNITS	100%

ASSESSMENT METHODOLOGY – DIRECT

	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Internal Examination	Yes	Yes	Yes	Yes	Yes
Assignment	Yes	Yes	Yes	Yes	Yes
Slip Test / Class Test	Yes	Yes	Yes	Yes	Yes
Project	No	No	No	No	No
Summative Examination	No	No	No	No	No

Assessment Indirect

	Yes/No	Yes/No	Yes/No
Assessment of Course Outcome by Student Feedback	Yes		
Feedback from Alumni	Yes		
Feedback from Educational Experts	Yes		
Feedback from Parents	Yes		

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.H.Geetha		
Course Coordinator / In-charge	Ms.R.Sailakshmi		

Module Coordinator (One person who would coordinate all Courses in a Programme according to OBE)	Mrs.N.Selvi		
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Approved by				
	Name	Signature	Seal	Date
HoD	Mrs.N.Selvi			
Dean Academics	Dr.S.Priya			
Principal	Dr.R.Sujatha			

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme :	B.Sc Animation, Viscom, CS, Networking, Food Science & Processing, Fire & Industrial Safety and Marine Catering Hotel Management,B.Com B&I,Honors and ACCA and B.B.A		
Course Name :	Hindi I	Course Code :	20UH101

Year / Semester	I / I	Section	
Total No. of Students	01	No. of Credits	3
Corresponding lab Paper	No	Total No. of Contact Hours	45
Course Teacher Name	Mrs.S.Neela		

S. No	Topic	Reference / Text Book Page No.	Teaching Aids	Mode of Delivery			Cumulative Hours
				No. of Hours			
	Unit I						
				L	T	P	
1	□□□□□□ – peshevar.	R 1-4 / T1-79&80	BB	2	1		9
2	□□□□ □□ □□□□□□ - dakoo say mahatma	R 1-7 / T1 - 87	BB	2	1		
3	□□□□□ □□□□ - hmara bharath	R 1-9 / T1-93	BB	2	1		
	Unit II						
1	□□□□□□ □□ □□□□ – sowdagar aur baloo.	R 1-11 / T2-104	BB	2	1		9
2	□□□□□ □□□□□□ - Laalachi kutha.	R 1-12/ T2-105	BB	2	1		
3	□□□□□ □□ □□□□ - Dharji aur haathi	R 1-13/ T2-116&117	BB	2	1		
	Unit III						
1	□□□ □□□□□□ □□□□□□ - □□□□□□ -1 – pages 1 to 10. .	R 1-14 to 30 / T3-5 to 32	BB	2	1		9
2	□□□□ □□□□	R1-31	BB	2	1		
3	□□□ □□□□.	R1-32	BB	2	1		
	Unit IV						
1	□□□□□□ □□ □□□□□ - Doctor and a patient.	R 1-33 / T4-222	BB	2	1		9

2	□□□□□□□□ □□ □□□□□□ - Shopkeeper and buyer. □□□□□□□□ □□ □□□□□□ □□ - Traveller and Auto man.	R 1-34 / T4-223	BB	2	1		
3	□□□□□□□□□□ □□ □□□□□□ □□ □□ □□□□□□ - Customer or Fruit seller and vegetable seller.	R 1-35 / T4-224	BB	2	1		
Unit V							
1	□□ □□ □□□□□□□□□□ □□ □□□□□□ - Names of fruits and vegetables.	R 1-35&36	BB	2	1		9
2	□□□□ - Names of condiments.	R 1-37	BB	2	1		
3	□□□□□ - Numbers - 1 to 50.	R 1-37 & 38	BB	2	1		

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open educational resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDo), and Google Slides(GS) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.
[Mark the abbreviation in the teaching aids column]

COURSE PLAN FOR CONTENT BEYOND SYLLABUS

SI.NO	Module	Lecture	Planned Topics	Date	Time	Total No of Hours Allotted
1	1	Lecture1	Framing words			
2	2	Lecture2	Framing simple sentences			

3	3	Lecture3	Asking questions		
4	4	Lecture 4	Simple phrases		

Gaps in the Syllabus –To meet Industrial Requirements

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours
				beyond the Time Table (HB)
1	Framing words and sentences	Assignment		3
2		Seminar		
3		Peer teaching		
4	NA	Industrial Visit	NA	NA

Resources [Citation style differs for each Programme, Kindly use the citation style (APA, MLA etc) applicable for your domain. This has been advised by the University Nominees and Experts last time]

Reference Book	
R1	A Complied book, covering all the topics of the syllabus prepared by the Department of Hindi.
Text Books	
T1	□□□□□□□□□□ □□□□ □□□□□□□□ □□□□□□ □□□□□□ □□□□□□ □□□□ □□□□□□ □□□□□□ □□□,□□□□□□: □□□□□□ □□□□□□ □□□□□□□□□□, □□□□□ - 518

T2	□□□□□ □□□□□□ □□□□□□I □□□□□ □□□□ □□□□□ □□□□□ □□□, □□□□ □□□□□□□ - □□□□□□□, 2010: □□□□□□□ □□□□□□□□□□□ □□□, 2016 : □□□□□□
T3	□□□□□□□□□□ □□□□ □□□□□□□□ □□□□□ □□□□□□□□ □□□□□□ □□□□□ □□□□□□ □□□□□□ □□□, □□□□□□□ □□□□□□□ □□□□□□□□□□□□: □□□□□ - 518.
T4	□□□□□□□□□□ □□□□ □□□□□□□ □□□□□ □□□□□□□□ □□□□□□□ □□□□□□ □□□□□□□□ □□□, □□□□□□□ □□□□□□□ □□□□□□□ □□□□□□□□□□□□: □□□□□ - 519.
Web Resources	
W1	
W2	
E – Books /Library INFLIBNET RESOURCES	
E1	
	Topics beyond syllabus
M1	NA
M2	NA
M3	NA

PORTION FOR EXAMINATION			
Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage (to be decided by the Department)
1	SLIP / CLASS TEST	UNIT - I	15%
2	I INTERNAL	UNIT - I, II, V	50%
3	II INTERNAL	UNIT - III, IV, V	50%
4	Summative Examination	ALL 5 UNITS	100%

ASSESSMENT METHODOLOGY – DIRECT
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	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Internal Examination	Yes	Yes	Yes	Yes	Yes

Assignment	Yes	Yes	Yes	Yes	Yes
Slip Test / Class Test	Yes	Yes	Yes	Yes	Yes
Project	No	No	No	No	No
Summative Examination	No	No	No	No	No

Assessment Indirect			
	Yes/No	Yes/No	Yes/No
Assessment of Course Outcome by Student Feedback	Yes		
Feedback from Alumni	No		
Feedback from Educational Experts	Yes		
Feedback from Parents	No		

Prepared by

Designation	Name	Signature	Date
Course Coordinator / In-charges	Mrs.S.Neela		
Module Coordinator (One person who would coordinate all Courses in a Programme according to OBE)			

Approved by

	Name	Signature	Seal	Date
HoD	Mrs.S.Neela			
Dean Academics	Dr.S.Priya			
Principal	Dr.R.Sujatha			

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc. (MCHM, CS, NW, Viscom, Animation, Fire & Industrial Safety, Food Science & Processing Management)

Title of the Course : General English- I		Course Code: 20UGE102
Year / Semester: I YEAR/ I SEMESTER	Section:	Total No. of Students: 52
No. of Credits: 3		Total no. of Contact hours: 45

Course Teacher (s) Name : Mrs.R.Suganthi Hepzibha, Dr.S.priya, Ms.T.S.Sridevi, Mr.C.Senthilkumar and Mr.V.V.Sundaram

S. No	Topic	Reference / text Book Page No.	Teaching Aids	Mode of Delivery No. of Hours			Cummulative Hours
				L	T	P	
Unit I							
1	Kinds of Sentences	R1-1 / R 06, 03	BB	2	1		9
2	Parts of Speech	R1-3 / R 06, 03	BB/PPT/V	2	1		

3	Tenses, Verbs and Modals	R1-6 / R 06, 03	BB	2	1		
Unit II							
1	My Financial Career - Stephen Leacock	R1-12	BB/V	3			9
2	Tattered Blanket - Kamala Das	R1-20	BB/V	3			
3	The Antidote - R.K. Narayan	R1-25	BB/V	3			
Unit III							
1	Etymology	R1-31	PPT	2	1		9
2	Synonyms& Antonyms	R1-33	PPT	2	1		
3	Homophones & Homonyms	R1-35	PPT	2	1		
Unit IV							
1	Sonnet 18	R1-38 / R 04	BB/PPT	3			9
2	Sonnet 55	R1-42 / R 04	BB/PPT	3			
3	Sonnet 116	R1-45 / R 04	BB/PPT	3			
Unit V							
1	Letter Writing (Formal and Informal)	R1-47 / R 06, 05	BB/WS	2	1		9
2	E-mail Writing (Formal and Informal)	R1-51 / R 06, 05	BB/WS	2	1		
3	Reading Comprehension	R1-54 / R 06,	BB/WS	2	1		

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open educational resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDo), and Google Slides(GS) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.
[Mark the abbreviation in the teaching aids column]

Text Books	
T1	General English-I, A Compiled book, covering all the topics of the syllabus prepared by the Department of English.
Reference Books	
R1	Dr.K.Alex. Soft Skills . New Delhi: S.Chand& Company Ltd, 1997. Print.
R2	Dr. Gupta C.B. Business Correspondence & Reporting -Business Law, Business Correspondence & Reporting (CA-Foundation) . New Delhi: Taxmann, 2018. Print.
R3	G.Radhakrishna Pillai. Emerald English Grammar and Composition . Bangalore: Emerald Publisher, 1998. Print.
R4	Paul Joseph Margaret. Bequest of Wings . USA: Macmillan India Limited, 1994. Print.
R5	Srivasan Hema. Communication Skills . Bangalore: Frank Brothers & Co. Ltd, 2004. Print.
R6	Wren & Martin. High School English Grammar & Composition . India: S.Chand & Company Ltd, 1995. Print.
Web Resources	
W1	https://www.enotes.com/topics/my-financial-career
W2	http://tatteredblanket.blogspot.com/

W3	https://www.poetryfoundation.org/poems/45087/sonnet-18-shall-i-compare-thee-to-a-summers-day
W4	https://www.poetryfoundation.org/poems/46455/sonnet-55-not-marble-nor-the-gilded-monuments
W5	https://www.sparknotes.com/nofear/shakespeare/sonnets/sonnet_116/
E – Books /Library INFLIBNET RESOURCES	
E1	https://nlist.inflibnet.ac.in/search/Record/EBC483375
E2	https://nlist.inflibnet.ac.in/search/Record/EBC481114
E3	https://nlist.inflibnet.ac.in/search/Record/EBC1864716

Gaps in the Syllabus				
SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) /
				Hours beyond the Time Table (HB)
1	Essay Writing on Subjective Topics	Assignment		3
2	Extempore	Seminar	3	
3	On Any Modules	Peer teaching	2	
4	NA	Industrial Visit	NA	NA

Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)

COURSE PLAN FOR CONTENT BEYOND SYLLABUS

Sl.NO	Module	Lecture	Planned Topics	Date	Time	Total No of Hours Allotted
1	1	Lecture 1	Newspaper/Article reading			
2	2	Lecture 2	Collecting & Reporting News			
3	3	Lecture 3	Learning a New Word Everyday			
4	4	Lecture 4	Public Speaking			

PORTION FOR EXAMINATION			
Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage (to be decided by the Department)
1	SLIP / CLASS TEST	UNIT - I	15%
2	I INTERNAL	UNIT - I, II, V	50%
3	II INTERNAL	UNIT - III, IV, V	50%
4	Summative Examination	ALL 5 UNITS	100%

Prepared by

Designation	Name	Signature	Date
Course Coordinator / In-charges	Mr.C.Senthilkumar		
Course Coordinator / In-charges	Mr.V.V.Sundaram		

Module Coordinator	Mrs.R.Suganthi Hepzibha	
--------------------	------------------------------------	--

Approved by			
	Name	Signature	Date
HoD	Mrs.R.Suganthi Hepzibha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE
COURSE PLAN – 2020– 2021 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Mathematical Foundation

Year / Semester : I/I

No of Credits : 5

Course Teacher Name : Mrs. Harini

Course Code : 20MF108

Total No. of Students : 52

Total No. of Contact Hours : 5

Corresponding Lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
1	Introduction - Notation and description of sets	T1-1.1	BB/ WB/ OER	1	0	0	1
2	Subsets & Venn- Euler Diagram	T1-1.3	BB/ WB/ OER	2	1	0	4
3	Operations on sets - Properties of set operations	T-1.9	BB/ WB/ OER	3	1	0	8
4	Verification of the basic laws by Venn diagram	T1-1.15	BB/ WB/ OER	3	1	0	12
5	The principal of duality	T1-1.24		2	1	0	15
UNIT - II							
6	Cartesian Product of Two Sets - Basic Definitions	T1-2.1	BB/ WB/ OER	2	1	0	3
7	Representation of Relation - Matrix Relation -	T1-2.10	BB/ WB/ OER	1	1	0	5
8	Di-Graph of a Relation - Principle of Mathematical Induction	T1-4.1	BB/ WB/ OER	1	1	0	7
9	Recurrence Relations	T1-5.5	BB/ WB/ OER	2	1	0	10
10	Telescopic Form of a Polynomial	T-5.15	BB/ WB/ OER	1	0	0	11
11	Find the Recurrence Relation	T1-5.1	BB/ WB/	1	1	0	13

			OER				
12	Solve the Recurrence	T1-5.5	BB/ WB/ OER	1	1	0	15
UNIT - III							
13	Logical Operators	T1-9.1	BB/ WB/ OER	1	0	0	1
14	Truth Tables	T1-9.21	BB/ WB/ OER	2	1	0	4
15	Tautology - Contradiction	T1-9.25	BB/ WB/ OER	2	1	0	7
16	Parsing Trees - Draw the parsing tree from the formula	T1-9.30	BB/ WB/ OER	3	1	0	11
17	Find the formula from the Parsing Tree	T1-9.31	BB/ WB/ OER	3	1	0	15
UNIT - IV							
18	Characteristic equation	T2-58	BB/ WB/ OER	2	0	0	2
19	Eigen value and Eigen vector	T2-55	BB/ WB/ OER	3	1	0	6
20	Cayley Hamilton theorem	T2-58	BB/ WB/ OER	3	1	0	10
21	Reduction to diagonal form	T2-64	BB/ WB/ OER	3	2	0	15
UNIT - V							
22	Graph - Finite and Infinite Graphs	T1-11.1	BB/ WB/ OER	2	0	0	2
23	Incidence and Degree -Isolated Vertex, Pendant Vertex, and Null Graph	T1-11.5	BB/ WB/ OER	2	1	0	5
24	Isomorphism	T1-11.12	BB/ WB/ OER	1	0	0	6
25	Sub-graphs - Walks, Paths and Circuits - Connected	T1-11.20	BB/ WB/ OER	2	1	0	9
26	Disconnected Graphs - - Konigsberg Bridge Problem - Operations on Graphs	T1-11.103	BB/ WB/ OER	2	1	0	12
27	Euler Graphs - Hamiltonian Paths and Circuits.	T1-	BB/ WB/	2	1	0	15

		11.102	OER				
Total							75

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included. [Mark the abbreviation in the teaching aids column]

Text Books	
T1	1) Discrete Mathematics by Dr. M.K. Venkatraman, Dr. N. Sridharan and N. Chandrasekaran, Published by The National Publishing Company, Basement, Regina Mansion, 46, Moore Street, Chennai – 600 001.
T2	2) Higher Engineering Mathematics by Dr. B.S. Grewal Published by Khanna Publishers , 2–B, Nath Market , NaiSarak , Delhi – 110006.
T3	3) Graph Theory with Applications to Engineering & Computer Science by Narsingh Deo, Published by Printice-Hall of India Private Ltd, M-97, Connaught Circus, New Delhi – 100 001.

Reference Books	
R1	1. "Discrete Mathematics" by Seymour Lipschutz& Marc Lars Lipson (Shaum's Outlines, 2nd Edition), Published by TATA McGraw-Hill Publishing Company Ltd, 7, West Patel Nagar, NewDelhi – 110008.
R2	2. A Textbook of Matrices by P.K MITTAL and SHANTHI NARAYAN Published by S.Chand& Company Ltd

Web Resources

W1	https://mathworld.wolfram.com/
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E – Books /Library INFLIBNET RESOURCES

E	http://www.cs.yale.edu/homes/aspnes/classes/202/notes.pdf
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COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

<u>Sl.NO</u>	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted		

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be	Proportion (Portion) in Percentage
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		Covered	
1	I INTERNAL	Unit - I, II, III (50%)	50%
2	II INTERNAL	Unit – III (50%) , IV, V	50%
3	End Semester Examination	Unit I to V	100%

Prepared by			
Designation	Name	Signature	Date
Course Coordinator / In-charge	Mrs. Harini		
Programme Coordinator			

Approved by			
Designation	Name	Signature	Date
HoD	Mr. R. Sivasubramanian		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : All First Year (Except F&IS)

Title of the Course : TAMIL
2020-
2021/III **Section:** **Course Code:** 19UT301

Year / Semester: **Total No. of Students: 36**
Total no. of Contact

No.Of Credits: 3 **hours:45**

S. No	Topic	Reference / text Book Page No.	Teaching Aids	Mode of Delivery No. of Hours			Cummulative Hours
				L	T	P	
Unit I							
1	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	R1-1/R1 - 335	BB	2	2		4
2	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	R1-4 /R2- 171	BB	2	2		4
3	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	R1-9 /R3 -70	BB	1	1		1

Unit II							
4	□□□□□□□□□□ □□	R1-14/1/ R4- 654		1	1		3
5	□□□□□ □□□□□□□□	R1-35/ R5-59	BB	1	1		3
6	□□□□□□□□□□ □□□□□□□□	R1-30/ R6-35	BB	1	1		3
Unit III							
9	□□□□□□□□□□ □□	R1-40/ R7-103	BB	1	1		9
Unit IV							
13	□□□□□□□□	R1-81/R8-60	BB				2
14	□□□□□□□□□□ □□	R1-82/ R8-92	BB	2	2		2
15	□□□□□□□□□□	R1-84/1R8-104	BB	2	2		3
16	□□□□□□□□□□ □□□□ - □□□□□□□□□□	R1-86/ R8-450 8	BB	1	1		2
Unit V							

17	□ □	R1- 92/R9- 109	BB	1	1		2
18	□ □	R1- 89/R 9- 362	BB	1	1		2
19	□ □ □ □ □ □ □ □ □ □ □ □ □ □	gilg;gh w;wy;	BB	3	3		5

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open educational resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDo), and Google Slides(GS) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.
[Mark the abbreviation in the teaching aids column]

COURSE PLAN FOR CONTENT BEYOND SYLLABUS

SI.NO	Module	Lecture	Planned Topics	Date	Time	Total No of Hours Allotted
1	1	Lecture 1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
2		Lecture 2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
3	2	Lecture 1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> ;			

Gaps in the Syllabus –To meet Industrial Requirements

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) /
				Hours beyond the Time Table (HB)
1	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Assignment		3
2	□ □	Seminar	3	
3	□ □	Peer teaching	2	

Resources [Citation style differs for each Programme, Kindly use the citation style

R9	□□□□□□□□□□□□ □□□□□ □□□□□□□□ -□□□□□□ □□□□□□□□□ □□□□□□□ □□□....
R10	□□.□□□□□□□□□. □□□□□ □□□□□□□ □□□□□□. □□□□□□: □□□□□□□□□ □□□□□□□. 2015Print.

E – Books /Library INFLIBNET RESOURCES

E1	
E2	
E3	
E4	

Topics beyond Syllabus

Module 1	
M2	NA
M3	NA
M4	NA

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage (to be decided by the Department)
	SLIP / CLASS TEST	Unit/Portion to be decided by the Course Teacher and the HoD	15%
	I INTERNAL	UNIT - I, II, V	50%
	II INTERNAL	UNIT - III, IV, V	50%
	Summative Examination	ALL FIVE UNITS	100%

ASSESSMENT METHODOLOGY – DIRECT

	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Internal Examination	Yes	Yes	Yes	Yes	Yes
Assignment	Yes	Yes	Yes	Yes	Yes
Slip Test / Class Test	Yes	Yes	Yes	Yes	Yes
Project	No	No	No	No	No

Summative Examination	No	No	No	No	No
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Assessment Indirect

	Yes/No	Yes/No	Yes/No
Assessment of Course Outcome by Student Feedback	Yes		

Feedback from Alumni	Yes		
Feedback from Educational Experts	Yes		
Feedback from Parents	Yes		

Designation	Prepared by		
	Name	Signature	Date

Course Coordinator / In-charge	Mrs.H.Geetha		
Course Coordinator / In-charge	Ms.R.Sailakshmi		
Module Coordinator (One person who would coordinate all Courses in a Programme according to OBE)	Mrs.N.Selvi		

Approved by				
	Name	Signature	Seal	Date
HoD	Mrs.N.Selvi			

Dean Academics	Dr.S.Priya			
Principal	Dr.R.Sujatha			

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN - 2020 - 21 (ODD SEMESTER)

Name of the Programme :	B.Sc Animation, Viscom, CS, Networking, Food Science & Processing, Fire & Industrial Safety and Marine Catering Hotel Management		
Course Name :	Hindi III	Course Code :	20UH301
Year / Semester	II / III	Section	
Total No. of Students	6	No. of Credits	3
Corresponding lab	No	Total No. of Contact	45

Paper		Hours	
Course Teacher Name	Mrs.S.Neela		

Sl. No.	TOPIC	Course Material Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I - एकांकी (one act play)							
1	• बहु की विदा (bahoo ki vida)	CM	BB / PPT	2	1		4
2	• अन्धेर नगरी (andhear nagaree)	CM	BB / PPT	2	1		5
UNIT – II - नैतिक कविताएं (Ethical poems)							
3	• कठ-पुतली है या जीवन है (kttputleehaiyajeevanhai)	CM	BB / PPT	2	1		3
4	• माँ (Maa)	CM	BB / PPT	2	1		3
5	• एक आशीर्वाद (Eakhaasheervadh)	CM	BB / PPT	2	1		3
UNIT – III - व्याकरण (grammar)							
6	• संज्ञा	CM	BB / PPT	2	1		3

Sl. No.	TOPIC	Course Material Page No	*Teaching Aids	Mode of Delivery			Cumulative Hours
				No of Hours			
	(sangya)						
7	• सर्वनाम (sarvanaam)	CM	BB / PPT	2	1		3
8	• क्रिया (Kriya)		BB / PPT	2	1		3
UNIT – IV - व्यावहारिक हिन्दी (Practical Hindi)							
9	• बीजक (Invoice)	CM	BB / PPT	2	1		3
10	• परिचय देना (अपना परिचय देना, अपनेपरिवार और अपने शहर के बारे में परिचय देना)	CM	BB / PPT	2	1		3
11	• दूरभाष में बातचीत (भोजनका आदेशऔर कुछ सामान, दवाईमँगवाने का आदेश)	CM	BB / PPT	2	1		3
UNIT – V – सृजनात्मक लेखन (Creative writing)							
12	• नारे लिखना- Writing slogans	CM	BB / PPT	3	1		4
13	• संकेत विकसित करना- Hints developing	CM	BB / PPT	4	1		5
TOTAL HOURS							45

L – Lecture T – Tutorial (Problems / Example Programs / Revision Classes) P – Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included. [Mark the abbreviation in the teaching aids column]

Text Books

- 1) हिन्दी प्रचार वाहिनी-३: दक्षिण भारत हिन्दी प्रचार सभा,मद्रास: हिन्दी प्रचारपुस्तकमाला, पुष्प – 549 पहला संस्करण - अक्तूबर, 2018 : दूसरा पुनर्मुद्रण – अप्रैल , 2019 : मुद्रक | |Page nos. 14,15,18,50 & 58,
- 2) हिन्दी व्याकरण प्रवेशिका-1 दक्षिण भारत हिन्दी प्रचार सभा, मद्रास |हिन्दी प्रचार प्रेस ,चेन्नै :17, पहला संस्करण - सितम्बर, 2011: दूसरा संस्करण – नवम्बर, 2017: मुद्रक |Page nos.9, 17, 18, 19 & 20
- 3) Dr.K.M.Chandra Mohan. Hindi Vatayan. Viswavidhalaya Prakasan Chowk,Varanasi-221001:Print.

Weblibliography

1. <http://hindi.swiftutors.com/hindi-self-introduction.html>
2. http://www.linguanaut.com/english_hindi.htm#ixzz6JaMa5AJR
3. <http://www.tlm4all.com/2019/10/10th-class-hindi-hints-stories.html>
4. <http://www.slogansinhindi.com/>

Reference Book :

A Compiled book, covering all the topics of the syllabus prepared by the Department of Hindi.

4) Gaps in the Syllabus

SL. NO	Name of the Topic	Proposed Action	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	Speaking Skill – Self Introduction		2	HT
2.	Reading Skill – Reading Activity		2	HT
3.	Speaking Skill – Assignment		1	HB

* Proposed Actions can be Assignments, Seminars, Peer Teaching, and Industrial Visit, Others (if any)

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

SL.NO	Module	Mode of	Teaching Aids	Planned Topics	Total No of Hours
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		Delivery			Allotted

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	Unit – III	20%
2.	I INTERNAL	Unit – II, V	50%
3.	II INTERNAL	Unit – I ,IV	50%
4.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	S.Neela		

Approved by			
	Name	Signature	Date
HoD	S.Neela		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc (Animation, Viscom, CS, Networking, FIS, FS&PM)						
Title of the Course : General English III			Course Code: 19UGE302			
Year / Semester: II YEAR / III SEMESTER			Section:		Total No. of Students:42	
No.Of Credits: 3			Total no. of Contact hours: 45			
Course Teacher (s) Name : Mrs.R.Suganthi Hepzibha, Ms.T.S.Sridevi, Mr.C.Senthilkumar and Mr.V.V.Sundaram						
Course Teacher (s) Name						
S. No	Topic	Reference / text Book Page No.	Teaching Aids	Mode of Delivery No. of Hours		
				L	T	P
Unit I						
1	SWOC - Introduction	R1-1 / R 06, 03	BB	3		
2	Strength, Weaknesses	R1-3 / R 06, 03	BB/PPT/V	3		
3	Opportunities, Threats	R1-6 / R 06, 03	BB	3		
Unit II						
1	Of Ambition	R1-12	BB/V	3		
2	Of Studies	R1-20	BB/V	3		
3	Of Truth	R1-25	BB/V	3		
Unit III						

1	Word Formation (Compound Words and Affixes)	R1-31	PPT	2	1	
2	Direct and Indirect Speech	R1-33	PPT	2	1	
3	Question Tags	R1-35	PPT	2	1	
Unit IV						
1	Synonyms and Antonyms (25 + 25)	R1-36 / R04	BB	2	1	
2	Idioms and Phrases (50)	R1-42 / R04	BB	2	1	
3	One Word Substitution (50)	R1-46 / R04	BB	2	1	
Unit V						
1	Correct usage of Nouns and Pronouns	R1	BB/PPT	2	1	
2	Correct usage of Adjectives	R1	BB/PPT	2	1	
3	Spotting the errors (Nouns, Pronouns and Adjectives)	R1	BB/PPT	2	1	

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(Ws) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open educational resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDo), and Google Slides(GS) and Whiteboards(WB), Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Text Books

T1	General English-III, A Compiled book, covering all the topics of the syllabus prepared by the Department of English.					
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Reference Books

R1	Bacon Francis. Complete Essays. Dover Publications: Dover Ed edition, 2008. Print.					
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R2	Srivasan Hema. Communication Skills . Bangalore: Frank Brothers & Co. Ltd, 2004. Print.					
R3	Wren & Martin. High School English Grammar & Composition . India: S.Chand & Company Ltd, 1995. Print.					
R4	G.Radhakrishna Pillai. Emerald English Grammar and Composition . Bangalore: Emerald Publisher, 1998. Print.					
R5	Dr.K.Alex. Soft Skills . New Delhi: S.Chand& Company Ltd, 1997. Print.					
R6	Dr. Gupta C.B. Business Correspondence & Reporting -Business Law, Business Correspondence & Reporting (CA-Foundation) . New Delhi: Taxmann, 2018. Print.					
R7	A.P.Bhardwaj. General English for Competitive Examinations . New Delhi: Dorling Kindersley (India) Pvt. Ltd, 2013. Print.					

E – Books /Library INFLIBNET RESOURCES

E1	https://nlist.inflibnet.ac.in/search/Record/EBC483375
E2	https://nlist.inflibnet.ac.in/search/Record/EBC481114
E3	https://nlist.inflibnet.ac.in/search/Record/EBC1864716

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT)
				Hours beyond the Time Table (HB)
1	Self Introduction	Assignment		3
2	Extempore	Seminar	3	
3	On Any Modules	Peer teaching	2	

4	NA	Industrial Visit	NA	NA
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Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)

COURSE PLAN FOR CONTENT BEYOND SYLLABUS

Sl.NO	Module	Lecture	Planned Topics	Date	Time	Total No of Hours Allotted
1	1	Lecture1	Lecture 1	Newspaper/Article reading		
2	2	Lecture2	Lecture 2	Collecting & Reporting News		
3	3	Lecture3	Lecture 3	Learning a New Word Everyday		
4	4	Lecture 4	Lecture 4	Public Speaking		

PORTION FOR EXAMINATION			
Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage (to be decided by the Department)
1	SLIP / CLASS TEST	UNIT - I	15%
2	I INTERNAL	UNIT - I, II, V	50%
3	II INTERNAL	UNIT - III, IV, V	50%
4	Summative Examination	ALL 5 UNITS	100%

Prepared by

Designation	Name	Signature
Course Coordinator / In-charges	Mr.C.Senthilkumar	

Module Coordinator	Mrs.R.Suganthi Hepzibha	
--------------------	--------------------------------	--

Approved by			
	Name	Signature	Date
HoD	Mrs.R.Suganthi Hepzibha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020– 2021 (ODD SEMESTER)

Name of the Programme: B.Sc. Computer Science (Security System Specialization)

Programme Code: CS1002

Title of the Course: Numerical Skills

Year / Semester: II / III

No of Credits: 2

Course Code: 19NS311

Total No. of Students: 42

Total No. of Contact Hours: 3

Course Teacher Name: Mr. R. Sivasubramanian			Corresponding Lab Paper: Yes / No				
Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
1	Numbers	T-3	BB/ WB/ OER	1	1	0	2
2	LCM & HCF	T-51	BB/ WB/ OER	1	1	0	4
3	Simplification	T-95	BB/ WB/ OER	1	0	0	5
4		Averages	T-206	BB/ WB/ OER	1	0	0
UNIT - II							
12	Problems on Ages	T-264	BB/ WB/ OER	1	1	0	2
13	Time and Work	T-526	BB/ WB/ OER	1	1	0	4
14	Surd and indices	T-278	BB/ WB/ OER	1	1	0	6
UNIT - III							
15	Pipes & Cisterns	T-510	BB/ WB/ OER	1	1	0	2
16	Time & Distance	T-562	BB/ WB/ OER	1	1	0	4
17	Problems on trains.	T-612	BB/ WB/ OER	1	1	0	6

UNIT - IV							
18	Calendar	T-819	BB/ WB/ OER	1	1	0	2
19	Clocks	T-823	BB/ WB/ OER	1	1	0	4
20	Permutation and combination.	T-841	BB/ WB/ OER	2	2	0	8
UNIT - V							
21	Area	T-688	BB/ WB/ OER	2	1	0	3
22	Volume and Surface Area	T-766	BB/ WB/ OER	2	1	0	6
Total							30

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical
 * LCD / PPT / Black Board (BB) / Worksheet (WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV), Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB), Wikipedia (W) any other tools may also be included. [Mark the abbreviation in the teaching aids column]

Text Book							
T	R S Agarwal Revised edition (21 February 2017), 'Quantitative Aptitude' S.Chand Publishers.						

Reference Books							
R1	Abhijit Guha (7th Ed, 2020), Quantitative Aptitude - Mc Graw Hills Publishers						
R2	Khattar Dinesh (2013, 3rd Edition), Quantitative Aptitude for Competitive Examinations, The Pearson Guide						

Web Resources

W1	https://www.indiabix.com/
W2	https://www.faceprep.in/quantitative-aptitude/

E – Books /Library INFLIBNET RESOURCES

E	https://www.careerbless.com/aptitude/qa/home.php
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COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

<u>SLNO</u>	Module	Mode of	Teaching Aids	Planned	Total No of Hours Allotted
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		Delivery		Topics			

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1	I INTERNAL	Unit - I, II, III (50%)	50%
2	II INTERNAL	Unit – III (50%) , IV, V	50%
3	End Semester Examination	Unit I to V	100%

Prepared by			
Designation	Name	Signature	Date
Course Coordinator / In-charge	Mr. R. Sivasubramanian		
Programme Coordinator			

Approved by			
Designation	Name	Signature	Date
HoD	Mr. R. Sivasubramanian		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

Name of the Programme :

F&IS,CS, ANI,NET,VIS,MCHM,B.COM,BBA,HONS&ACCA

Title of the Course :

**BASIC
TAMIL
2020-
2021/1**

**Course
Code: 19UAT310**

Year / Semester:

Section:

**Total No. of Students:
Total no. of Contact hours:**

No.Of Credits:

3

30

S. No	Topic	Reference / text Book Page No.	Teaching Aids	Mode of Delivery No. of Hours			Cummulative Hours
				L	T	P	
Unit I							
1	□□□□□□□□□□□□	R1-1	BB	2	2		6
Unit II							
2	□□□□□□	R1-2		1	1		2
5	□□□□□□□□□□□□	R1-3	BB	1	1		2
6	□□□□□□	R1-4	BB	1	1		1
7	□□□□□□□□□□□□□□□□ □□	R1-4	BB	1	1		1
Unit III							
9	□□□□□□ □□□□□□□□□□□□□□	R1-05	BB	1	1		6
Unit IV							
15	□□□□□□□□□□□□□□ □□□□□□□□□□□□□□	R1-7	BB	2	2		3

16	□□□□□□□□□□ □□□□ □□□□□□□□□□ □□□□□□□□ □□□□□ □□□□□□□ □□□□□	R1-8	BB	1	1		3
Unit V							
19	□□□□□□□□□□ □□□□□□□□□□ □□□□□ □□□□□□□□□□	R1-8	BB	3	3		6

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open educational resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDo), and Google Slides(GS) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.
[Mark the abbreviation in the teaching aids column]

COURSE PLAN FOR CONTENT BEYOND SYLLABUS

Sl.NO	Module	Lecture	Planned Topics	Date	Time	Total No of Hours Allotted
1	1	Lecture1	□□□□□□□□□□□□□□□□			

			□□□□□□□□			
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Reference Books	
R1	□□□□□□ □□□□□□ -1 – □□□□□□□□ □□□□□□□□ – □□□□□□□□□□ □□□□□□□□□□ □□□□□□□□.

E – Books /Library INFLIBNET RESOURCES

E1	
E2	
E3	
E4	

Topics beyond Syllabus

Module 1	
M2	NA
M3	NA
M4	NA

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage (to be decided by the Department)
	I INTERNAL	UNIT - I, II, V	50%
	II INTERNAL	UNIT - III,	50%

		IV, V	
	Summative Examination	ALL FIVE UNITS	100%

ASSESSMENT METHODOLOGY – DIRECT

	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Internal Examination	Yes	Yes	Yes	Yes	Yes
Assignment	Yes	Yes	Yes	Yes	Yes
Slip Test / Class Test	Yes	Yes	Yes	Yes	Yes
Project	No	No	No	No	No
Summative Examination	No	No	No	No	No

Assessment Indirect

	Yes/No	Yes/No	Yes/No
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Assessment of Course Outcome by Student Feedback	Yes		
Feedback from Alumni	Yes		
Feedback from Educational Experts	Yes		
Feedback from Parents	Yes		

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Ms.R.Sailakshmi		

Module Coordinator (One person who would coordinate all Courses in a Programme according to OBE)	Mrs.N.Selvi		
---	--------------------	--	--

Approved by				
	Name	Signature	Seal	Date
HoD	Mrs.N.Selvi			
Dean Academics	Dr.S.Priya			
Principal	Dr.R.Sujatha			

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme :

F&IS,CS

Title of the Course : ADVANCED TAMIL
Year / Semester: 2020-2021/1 **Section:**
No.Of Credits: 3

Course Code: 19UAT310
Total No. of Students:
Total no. of Contact hours: 30

S. No	Topic	Reference / text Book Page No.	Teaching Aids	Mode of Delivery No. of Hours			Cummulative Hours
				L	T	P	
Unit I							
1	ஊரகாலம் - ஊரகாலம் > ஊரகாலம் ஊரகாலம் - ஊரகாலம் ஊரகாலம்.	R1-1-4/ R1,2-154 / 74	BB	2	2		6
Unit II							
2	ஊரகாலம் - ஊரகாலம் ஊரகாலம், ஊரகாலம்.	R1-6,7/R3-13/48		1	1		2
5	ஊரகாலம் ஊரகாலம் - ஊரகாலம் ஊரகாலம்(ஊரகாலம் ஊரகாலம்;).ஊரகாலம். ஊரகாலம் ஊரகாலம் ஊரகாலம்	R1-7,9/ R4-26/52	BB	1	1		2
6	ஊரகாலம்- ஊரகாலம் ஊரகாலம் (ஊரகாலம் ஊரகாலம்).	R1-10/R5- 99	BB	1	1		1

7	<p>□□□□□□□□-□□□□□ □□□□□□□□□□ (□□□□□□ □□□□□□□□ □□□□□□□□□□□□). □□□□□ □□□□□□□□- □□□□□□□□□□□□□□ □□□□□ 10 □□□□□ □□□□□□□□. .</p>	R1-15,19/ R6-121	BB	1	1		1
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Unit III

9	<p>□□□□□□□□□□ □□□□□□□□□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□□□</p>	R1-37,38/ R8-23/ 40	BB	1	1		6
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Unit IV

15	<p>□□□□□□□□□□ □□□□□□□□ - □□□□□□□□ □□□□□□ □□□□□□□□, □□□□□□□□ □□□□ □□□□□□□□.</p>	R1-22/ R7 - 264	BB	2	2		3
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16	<p>□□□□□□□□ □□□□□□□ - □□□□□□□□□□, □□□□□□□□□□□, □□□□□□□□□□□□□□, □□□□□□□□, □□□□□□ □□ □□□□□□□□ □□□□□□□□ □□□□□□□□, □□□□□□□□□□ □□□□□□□□</p>	R1-24/R1-R7 -403	BB	1	1		3
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Unit V

19	□□□□□□□□□□□□□□□□ (□□□□□□□□□□□□□□□□□□□□□□)	gilg;ghw;wy;	BB	3	3		6
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* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open educational resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDo), and Google Slides(GS) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.
[Mark the abbreviation in the teaching aids column]

COURSE PLAN FOR CONTENT BEYOND SYLLABUS

SI.NO	Module	Lecture	Planned Topics	Date	Time	Total No of Hours Allotted
1	1	Lecture1	□□□□□□□□□□□□□□□□ □□□□□□□□□□			
2		Lecture2	□□□□□□□□ □□□□□□□□			
3	2	Lecture1	□□□□□□□□ □□□□□□□□□;			

Gaps in the Syllabus –To meet Industrial Requirements

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) /
				Hours beyond the Time Table (HB)
1	□□□□□□□□ □□□□□□□□	Assignment		3
2	□□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□□□	Seminar	1	
3	□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□□□□□□□	Peer teaching	2	

Resources [Citation style differs for each Programme, Kindly use the citation style (APA, MLA etc) applicable for your domain. This has been advised by the University Nominees and Experts last time]

Reference Books

R1	□□□□□□ □□□□□□ -1 – □□□□□□□□ □□□□□□□□ – □□□□□□□□□□ □□□□□□□□□□ □□□□□□□□.					
R2	□□□□□□□□□. □□□□□□□□□ □□□□□□□□. □□□□□□: □□□□□□□□□ □□□□□□□□□, 1920. Print.					
R3	□□□□□□□□□□.□□□□□□□□□□ □□□□□□□□. □□□□□□□□: □□□□ □□□□□□□□□□□□□□□, □□□□□□□□□□ □□□□□□□□□□ □□□□□□□□,1993.Print.					
R4	□□□□. □□□□□□□. □□□□□□□□□□: □□□□□□ □□□□□□□□□□, 1996. Print.					
R5	□□. □□□□□□□□□ □□□□□□- □□□□□□□□□□□□ /□□□□□□□□□□□□□□□□. □□□□□□□□□□□□□□□□. □□□□□□□□□□: □□□□□□□ □□□□□□□□□□□□□□□,2002. Print.					

R6	□□.□□□□□□. □□□□□□□□+□□□□□□. □□□□□□: □□□□□□ □□□□□□□□□□, 2009. Print.
R7	□□□□□ □□□□□□□□□□- □□□□□□□□□□. □□□□□□ □□□□□□ □□□□□□□□□□□□□□□□. □□□□□□: □□□□□□□□□ □□□□□□□□, 2007. Print.
R8	□□□□.□□□□□□□□□□□□□□. □□□□□ □□□□□□ □□□□□ □□□□□□□□□□? □□□□□□: □□□□□□□□□□□□□□, 1999. Print.
R9	□□.□□□□□□□□□□. □□□□□□ □□□□□□□□ □□□□□□□□. □□□□□□□□: □□□□□□□□□□ □□□□□□□□. 2015 Print.

Topics beyond Syllabus

Module 1	
M2	NA
M3	NA
M4	NA

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage (to be decided by the Department)
	I INTERNAL	UNIT - I, II, V	50%
	II INTERNAL	UNIT - III, IV, V	50%
	Summative Examination	ALL FIVE UNITS	100%

ASSESSMENT METHODOLOGY – DIRECT

	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
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Internal Examination	Yes	Yes	Yes	Yes	Yes
Assignment	Yes	Yes	Yes	Yes	Yes
Slip Test / Class Test	Yes	Yes	Yes	Yes	Yes
Project	No	No	No	No	No
Summative Examination	No	No	No	No	No

Assessment Indirect

	Yes/No	Yes/No	Yes/No
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Assessment of Course Outcome by Student Feedback	Yes		
Feedback from Alumni	Yes		
Feedback from Educational Experts	Yes		
Feedback from Parents	Yes		

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.H.Geetha		

Module Coordinator (One person who would coordinate all Courses in a Programme according to OBE)	Mrs.N.Selvi		
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Approved by				
	Name	Signature	Seal	Date
HoD	Mrs.N.Selvi			
Dean Academics	Dr.S.Priya			
Principal	Dr.R.Sujatha			

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc (Animation, Viscom, FIS, FS&PM, MCHM, CS, Networking), BBA, B.Com (B&I, Hons, ACCA)		
Title of the Course : CRT English III Practical		Course Code: 18CRT509
Year / Semester: III YEAR / V SEMESTER	Section:	Total No. of Students:

No.Of Credits: 3					Total no. of Contact hours: 30		
Course Teacher (s) Name : Mrs.R.Suganthi Hepzibha, Ms.T.S.Sridevi, Mr.C.Senthilkumar and Mr.V.V.Sundaram							
Course Teacher (s) Name							
S. No	Topic	Reference / text Book Page No.	Teaching Aids	Mode of Delivery No. of Hours			
		T 1 / R 04		L	T	P	
Unit I							
1	Self Introduction	WL	BB	3			
2	Acquiring Confidence in Speaking English	WL	BB/PPT/V	3			
Unit II							
1	Life Skills – Leadership, Time Management, Team Building and Social Skills	R3-49	BB	3			
2	Resume Writing	R2-113	BB	3			
Unit III							
1	Basics of Personal Interview	WL	BB	2	1		
2	Mock Interview	NA	BB	2	1		
Unit IV							
1	Basics of Group Discussion	WL	BB	2	1		
2	Mock Group Discussion	NA	BB	2	1		
Unit V							

1	Placement Training – Vocabulary, Sentence Correction, Essay Writing	WL	BB	2	1	
2	Communication Practice for Placements	NA	BB	2	1	

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open educational resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDo), and Google Slides(GS) and Whiteboards(WB), Wikipedia (W) any other tools may also be included.
[Mark the abbreviation in the teaching aids column]

Reference Books

R1	Sanjay Kumar, Pushp Lata. Communication Skills. New Delhi: Oxford University Press, 1999. Print.
R2	Srivasan Hema. Communication Skills . Bangalore: Frank Brothers & Co. Ltd, 2004. Print.
R3	Dr.P.Prasad. The Functional Aspects of Communication Skills . Bangalore: S.K.Kataria and Sons Ltd, 2005. Print.

E – Books /Library INFLIBNET RESOURCES

E1	https://nlist.inflibnet.ac.in/search/Record/EBC483375
E2	https://nlist.inflibnet.ac.in/search/Record/EBC481114
E3	https://nlist.inflibnet.ac.in/search/Record/EBC1864716

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) /
				Hours beyond the Time Table (HB)

1	Extempore	Seminar	3	
2	On Any Modules	Peer teaching		
3	NA	Industrial Visit	NA	NA

Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)

COURSE PLAN FOR CONTENT BEYOND SYLLABUS

Sl.NO	Module	Lecture	Planned Topics	Date	Time	Total No of Hours Allotted
1	1	Lecture1	Lecture 1	Newspaper/Article reading		
2	2	Lecture2	Lecture 2	Collecting & Reporting News		
3	3	Lecture3	Lecture 3	Learning a New Word Everyday		

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage (to be decided by the Department)
1	I INTERNAL	UNIT - I, II, V	50%

2	II INTERNAL	UNIT - III, IV, V	50%		
3	Summative Examination	ALL 5 UNITS	100%		

Prepared by

Designation	Name	Signature
Course Coordinator / In-charges	Mr.S.Sivakumar	
Module Coordinator	Mrs.R.Suganthi Hepzibha	

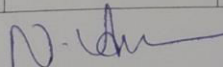
Approved by

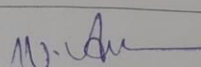
	Name	Signature	Date
HoD	Mrs.R.Suganthi Hepzibha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

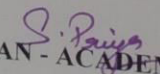


SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE
DEPARTMENT OF COMPUTER SCIENCE
TEACHING PLAN - ACADEMIC YEAR 2020 -2021
[EVEN SEMESTER]

S.NO	COURSE CODE	COURSE NAME	FACULTY
1	20UT201	General Tamil II	Mrs.H.Geetha
2	20UH201	Hindi II	Mrs.S.Neela
3	20UGE202	General English II	Mr.V.V.Sundaram
4	20CS203	Object Oriented Programming with C++	Mrs.N.Anuradha
5	20CS204	Operating Systems	Mrs.S.Nirmala Devi
6	20OR206	Operations Research	Mr.S.Suriya Prakash
7	20CS206	Object Oriented Programming with C++ Lab	Mrs.N.Anuradha
8	20CS207	Introduction to Computer Networks	Mr.J.Rajkumar
9	20CS208	Linux Lab	Mrs.S.Nirmala Devi
10	20ES210	Environmental Studies	Mr.J.Rajkumar
11	19UT401	General Tamil IV	Mrs.H.Geetha
12	19UH401	Hindi IV	Mrs.S.Neela
13	19UGE402	General English IV	Mrs.S.Senthil Kumar
14	19CS403	Relational Database Management System	Mrs.J.Varalakshmi
15	19CS404	Penetration Testing Fundamentals	Mrs.V.Gayathri
16	19CS405	Database Security Lab	Mrs.J.Varalakshmi
17	19CS406	Penetration Testing Lab	Mrs.V.Gayathri
18	19WR409	Reasoning Skills	Mr.R.Sivasubramaniam
19	19UBT410	Basic Tamil IV	Ms.R.Sai Lakshmi
20	19UAT411	Advanced Tamil IV	Mrs.H.Geetha
21	19AN408	NME : Basic 2D Animation	Mr. S.Praveen Kumar
22	19CS407	Office Automation Lab – II	Mr.J.Rajkumar


for **FACULTY INCHARGE**


HoD


DEAN - ACADEMICS


PRINCIPAL

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (EVEN SEMESTER)

1. Name of the Programme :	2. ANI/VIS/CS/Net/MCHM/FSPM/B.Com B&I/HONS&ACCA/BBA		
3. Course Name :	4. General Tamil II	5. Course Code :	6. 20UT201
7. Year / Semester	8. I/II	9. Section	10.
11. Total No. of Students	12. 51	13. No. of Credits	14. 3
15. Corresponding lab Paper	16. Yes / No.	17. Total No. of Contact Hours	18. 3
19. Course Teacher Name	20.		

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I							
1	திருஞானசம்பந்தர்- (திருஆலவாய்	CM/2	BB	2			2
2	திருநாவுக்கரசர் - (நமச்சிவாய திருப்பதிகம்)	CM/3	BB	2			2
3	சுந்தரர் – (திருப்பூவணம் திருத்தலம்)	CM/4	BB	2			2
4	ஹெ.ஆ.கிருஷ்ணப்பிள்ளை(இரட்சணிய மனோகரம்)	CM/5	BB	3			3
UNIT – II							
5	பொய்கையாழ்வார் - (முதல் திருவந்தாதி)	CM/6	BB	2			2

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
6	நம்மாழ்வார்- (திருவாய்மொழியில்)	CM/7	BB	2			2
7	ஆண்டாள் -(திருப்பாவை)	CM/8	BB	2			2
8	குணங்குடி மஸ்தான் சாகிபு (பராபரக்கண்ணி)	CM/9	BB	3			3
UNIT – III							
9	பலவீனத்தை பந்தாடுவோம் - வெ.இறையன்பு	CM/10	BB	2			2
10	தமிழ்நாட்டு காளை விளையாட்டும் மேல்நாட்டு காளைப்போரும்-முனைவர் ஆ.முத்தையா-	CM/15	BB	2			2
11	இன்றியமையா இதழியல் கலை - முனைவர்.மா.பா.குருசாமி	CM/24	BB	2			2
12	தமிழில் அறிவியல் -மணவை. முஸ்தபா -	CM/28	BB	2			2
13	கறுப்பு- முனைவர் தொ. பரமசிவன்	CM/34	BB	1			1
UNIT – IV							
14	சொல்வகைகள்	CM/39	BB	3			3
15	அணிஇலக்கணம்	CM/42	BB	3			3
16	வினாவும் – விடையும்,	CM/44	BB	3			3
UNIT – V							
17	பக்தி இலக்கியத்தின் தோற்றமும் வளர்ச்சியும்	CM/48	BB	3			3
18	உரைநடையின் தோற்றமும் வளர்ச்சியும்	CM/50	BB	3			3
19	கட்டுரைப்பயிற்சி.	-	BB	3			3
TOTAL HOURS							45

L – Lecture T – Tutorial (Problems / Example Programs / Revision Classes) P – Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB), Wikipedia (W) any other tools may also be included. [Mark the abbreviation in the teaching aids column]

Course Material

21. பொதுத்தமிழ்II – பாடநூல் தொகுப்பு கல்லூரித் -தமிழ்த்துறை வெளியீடு

Reference Books

1. தேவாரம்.சைவசித்தாந்த நூற்பதிப்புக்கழக வெளியீடு, சும்பகோணம்: 1990. Print.
2. நாலாயிரதிவ்வியப்பிரபந்தம்.சைவசித்தாந்த நூற்பதிப்புக்கழக வெளியீடு,1992 .Print.
3. சங்க இலக்கியமும் உரைநடையும்.மதுரை காமராசர் வெளியீடு, சென்னை: 1982. Print.
4. இதழியல்கலை.முனைவர்.மா.பா.குருசாமி.தமிழ்ப்புத்தக்காலயம், சென்னை: 1975. Print.
5. பயன்பாட்டுத்தமிழ் இலக்கணம்.மணிவாசகர் பதிப்பகம், மதுரை: 1995.Print.
6. தண்டியலங்காரம்.சைவ சித்தாந்த நூற் பதிப்புக் கழக வெளியீடு,சென்னை: 1976.Print.
7. தமிழ் இலக்கிய வரலாறு-1 .மது.ச.விமலானந்தம். முல்லை நிலையம், சென்னை: 1976.Print.

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	செய்தித்தாள்கள் வாசித்தல்		2	(HB)
2.	புத்தகம் வாசித்தல்		2	(HB)

* Proposed Actions can be Assignments, Seminars, Peer Teaching, Industrial Visit, Others (if any)
COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	1.1	Assignment	2	கட்டுரை எழுதுதல்	2
1	1.1.1	Seminar	2	புத்தகம் வாசித்து விமர்சனம் செய்தல்	2
2	2.1	Peer teaching	2	நடைமுறை நிகழ்வுகளை கலந்தாலோசித்தல்	2

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	Unit – I	20%
2.	I INTERNAL	Unit – I, II, III (up to -----)	40%
3.	II INTERNAL	Unit – III (from -----) , IV, V	40%
4.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date

Course Coordinator / In-charge	Mrs . N . SELVI		
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Approved by			
	Name	Signature	Date
HoD	Mrs . N . SELVI		
Dean Academics	Dr.S.PRIYA		
Principal	Dr.R.SUJATHA		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN - 2020 - 21 (EVEN SEMESTER)

22. Name of the Programme :	23. B.Sc Animation, Viscom, CS, Networking, Food Science & Processing, Fire & Industrial Safety and Marine Catering Hotel Management, B.Com B&I, Honors and ACCA		
	24.		
25. Course Name :	26. Hindi II	27. Course Code :	28. 20UH201
29. Year / Semester	30. I / II	31. Section	32.
33. Total No. of Students	34. 1	35. No. of Credits	36. 3
37. Corresponding lab Paper	38. No	39. Total No. of Contact Hours	40. 45
41. Course Teacher Name	42. Mrs.S.Neela		

Sl. No.	TOPIC	Course Material Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I - गद्य(Prose)							
1	चालीस करोड़ कुरते कहाँ से.....- Chaleeskaroodkurthea khan say	CM-02	BB / PPT	2	1		3
2	दक्षिण भारत हन्दी प्रचार सभा – Dhakshin Bharath Hindi pracharsabha	CM-3	BB / PPT	2	1		3
3	हर्दि दविस – Hindi divas	CM-6	BB / PPT	2	1		3
4	ओलपिकि में भारतीय महिलाओं ने झंडे गाड दएि – Olympic Meinbharatheeya mahilaon ney jande gadhdiyea	CM-4	BB / PPT	2	1		3
UNIT – II - आधुनिक कविता (Adhoonikkavitha)							
5	सीखो - Seeko	CM-7	BB / PPT	1	1		2
6	बड़ा कौन है ?- badakounhai	CM-8	BB / PPT	1	1		2
7	पुष्प की अभलिषा – pushpakeeabhilasha	CM-11	BB / PPT	1	1		2

Sl. No.	TOPIC	Course Material Page No	*Teaching Aids	Mode of Delivery			Cumulative Hours
				No of Hours			
8	एक बूँद - Eakhboondh	CM-9	BB / PPT	1	1		2
UNIT – III - सामान्य व्याकरण (Applied grammar)							
9	हन्दि प्रचार वाहनी I – Hindi pracharvahinee (11 to 20)	CM-14 to 33	BB / PPT	2	1		3
10	सुबोध हन्दि रचना 1 – Subodh Hindi rachna(5 to 11)	CM-34 to 54	BB / PPT	2	1		3
11	वलिोम शब्द – opposites - Selected 25	CM-13	BB / PPT	2	1		3
UNIT – IV - राष्ट्रिय ज्ञान (National knowledge)							
12	राष्ट्रगान - जन-गण-मन -National Anthem-Jana-Gana-Mana	CM-56	BB / PPT	3	1		4
13	वन्देमातरम् – vandematharam (First two paragraphs)	CM-57 to 59	BB / PPT	2	1		3
UNIT – V – पत्र लेखन (Letter Writing)							
14	निजी पत्र - Personal Letter (Asking permission to father for tour, Letter to friend to study Hindi)	CM-60	BB / PPT	2	1		3
15	कार्यालय पत्र - Official Letter (Asking for loan,	CM-61	BB / PPT	2	1		3

Sl. No.	TOPIC	Course Material Page No	*Teaching Aids	Mode of Delivery			Cumulative Hours
				No of Hours			
	Opening a bank account)						
16	वाणजियि पत्र - Commercial letter (Ordering books to the book company, Letter to the company regarding missing parcel)	CM-62	BB / PPT	2	1		3
TOTAL HOURS							45

L – Lecture T – Tutorial (Problems / Example Programs / Revision Classes) P – Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included. [Mark the abbreviation in the teaching aids column]

Course Material

8.

the syllabus prepared by the Department of Hindi.

Hindi II. A Complied book, covering all the topics of

Reference Books

5) प्रश्नोत्तर सहति मध्यमा पाठ्य सामग्री | दक्षिण भारत हन्दि प्रचार सभा, मद्रास : पहला संस्करण – जून, 2018 चौथा

पुनरमुद्रण – जून , 2019 :मुद्रक | Page nos.22, 24, 40 and 45, 9 and 11

6) प्रश्नोत्तर सहति प्राथमकि पाठ्य सामग्री | दक्षिण भारत हन्दि प्रचार

सभा, मद्रास : पहला संस्करण - सतिम्बर, 2010 तेरहवाँ पुनरमुद्रण – जून, 2016 :मुद्रक | Page nos. 57 and 73, 33 to 51,129 to 150

7) Dr.K.M.Chandra Mohan. Hindi Vatayan. Viswavidhalaya Prakasan Chowk, Varanasi-221001:Print.

Webliography

1. https://en.wikipedia.org/wiki/Jana_Gana_Manana
2. https://en.wikipedia.org/wiki/Vande_Mataram

Gaps in the Syllabus

SL. NO	Name of the Topic	Proposed Action	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	Speaking Skill – Self Introduction		2	HT
2.	Reading Skill – Reading Activity		2	HT
3.	Speaking Skill – Assignment		1	HB

* Proposed Actions can be Assignments, Seminars, Peer Teaching, and Industrial Visit, Others (if any)

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	Unit – IV	20%
2.	I INTERNAL	Unit – II, I(Chapter 1 & 2)	50%
3.	II INTERNAL	Unit – I (Chapter 3 & 4) , III,V	50%
4.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	S.Neela		

Approved by

Sl. No.	TOPIC	Course Material Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
UNIT – I - GRAMMAR							
1	Sentence Pattern: Introduction- Types of Sentence Pattern - Subject – Verb – Object – Direct Object – Indirect Object - Complement – Adjunct	CM-01	BB / PPT	2	1		3
2	Direct-Indirect Speech: Introduction - Procedure for converting Direct speech into Indirect speech - Rules for converting Direct speech into Indirect speech - Change in pronouns - Change in tenses - Change in modals - Changes for Assertive Sentences – Changes for Imperative sentences - Changes for Exclamatory sentences - Changes for Interrogative sentences - Punctuation in Direct speech - Rules for converting Indirect speech into Direct speech.	CM-10	BB / PPT	2	1		3
3	Active Voice – Passive Voice: Introduction – Usage: Active Voice. Passive voice – Reasons for using Passive voice - Changing Active voice to Passive voice - Changing Passive voice to Active voice (Changes for nine tenses) - Suggestions for using Active and passive voice.	CM-18	BB / PPT	2	1		3
UNIT – II - PROSE							
4	The Necklace – Guy De Maupassant: Introduction – Theme – Summary – Critical Appreciation.	CM-22	VIDEO	3			3
5	Little Girls Wiser than Men – Leo Tolstoy: Introduction – Theme – Summary – Critical Appreciation.	CM-34	VIDEO	3			3
6	An Astrologer’s Day – R.K.Narayan: Introduction – Theme – Summary – Critical Appreciation.	CM-37	VIDEO	3			3
UNIT – III - VOCABULARY							
7	Idioms & Phrases: Importance (Selected 50)	CM-43	BB	2	1		3

Sl. No.	TOPIC	Course Material Page No	*Teaching Aids	Mode of Delivery			Cumulative Hours
				No of Hours			
8	Synonyms & Antonyms: Importance of learning words (Selected 50)	CM-52	BB	2	1		3
9	One Word Substitution: Importance – Usage in the Sentence (Selected 50)	CM-54	BB	2	1		3
UNIT – IV - POEM							
10	The Lotus - Toru Dutt: Introduction to Sonnet – Literary Devices – Summary.	CM-57	VIDEO	3			3
11	If – Rudyard Kipling: Introduction – Literary Devices – Summary.	CM-59	VIDEO	3			3
12	The Road Not Taken – Robert Frost: Introduction – Literary Devices – Summary.	CM-64	VIDEO	3			3
UNIT – V – SENTENCE CORRECTION							
13	Correct Usage: Nouns – Definition – Rules.	CM-67	BB / PPT	2	1		3
14	Correct Usage: Pronoun – Definition – Rules. Correct Usage: Adjectives – Definition – Rules.	CM-69	BB / PPT	2	1		3
15	Spotting Grammatical Error: Nouns – Pronouns – Adjectives – Exercises.	CM-71	BB / PPT	2	1		3
TOTAL HOURS							45

L – Lecture T – Tutorial (Problems / Example Programs / Revision Classes) P – Practical

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Course Material

9. the topics of the syllabus prepared by the Department of English.

General English II. A Compiled book, covering all

SrivasanHema. **Communication Skills.** Bangalore:

Wren & Martin. **High School English Grammar &**

G.RadhakrishnaPillai. **Emerald English Grammar**

Dr.K.Alex. **Soft Skills.** New Delhi: S.Chand&

Dr. Gupta C.B. **Business Correspondence & Reporting**

-Business Law, Business Correspondence & Reporting (CA-Foundation). New Delhi: Taxmann, 2018. Print.

A.P.Bhardwaj. **General English for Competitive**

Examinations. New Delhi: Dorling Kindersley (India) Pvt. Ltd, 2013. Print.

Michael Swan. **Practical English Usage.** New Delhi:

Oxford University Press,2008.Print

Randolph Quirck, Sidney Greenbaum, Geoffrey Leech,

Jan Svartvik. **A Comprehensive Grammar of the English Language.** New Delhi: Dorling Kindersley (India) Pvt. Ltd, 2010. Print.

John Adair. **The Effective Communicator.** Noida:

Anubha Printers. 2005. Print.

Reference Books

1. Frank Brothers & Co. Ltd, 2004. Print.
2. **Composition.** India: S.Chand& Company Ltd, 1995. Print.
3. **and Composition.** Bangalore: Emerald Publisher, 1998. Print.
4. Company Ltd, 1997. Print.
5. Dr. Gupta C.B. Business Correspondence & Reporting -Business Law, Business Correspondence & Reporting (CA-Foundation). New Delhi: Taxmann, 2018. Print.
6. A.P.Bhardwaj. **General English for Competitive Examinations.** New Delhi: Dorling Kindersley (India) Pvt. Ltd, 2013. Print.
7. Michael Swan. **Practical English Usage.** New Delhi: Oxford University Press,2008.Print
8. Randolph Quirck, Sidney Greenbaum, Geoffrey Leech, Jan Svartvik. **A Comprehensive Grammar of the English Language.** New Delhi: Dorling Kindersley (India) Pvt. Ltd, 2010. Print.
9. John Adair. **The Effective Communicator.** Noida: Anubha Printers. 2005. Print.

E – Books /Library INFLIBNET RESOURCES

10. <https://nlist.inflibnet.ac.in/search/Record/EBC483375>
11. <https://nlist.inflibnet.ac.in/search/Record/EBC481114>
12. <https://nlist.inflibnet.ac.in/search/Record/EBC1864716>

Gaps in the Syllabus

SL. NO	Name of the Topic	Proposed Action	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	Speaking Skill – Self Introduction		3	HT
2.	Reading Skill – Reading Activity		2	HT
3.	Speaking Skill – Assignment		1	HB

* Proposed Actions can be Assignments, Seminars, Peer Teaching, Industrial Visit, Others (if any)

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

SL.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	1	Reading Skill	Newspaper	Newspaper Reading	1
2	2	Reading Skill	Magazine	Article / Magazine Reading	1
3	3	Speaking Skill	Oral	Debate / Group Discussion	1

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	Unit – I	20%
2.	I INTERNAL	Unit – I, II, III (Chapter 1 & 2)	50%
3.	II INTERNAL	Unit – III (Chapter 2 & 3) , IV, V	50%
4.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	R.Suganthi Hepzibha		

Approved by			
	Name	Signature	Date
HoD	R.Suganthi Hepzibha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (EVEN SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course	:	Object Oriented Programming with C++	Course Code	:	20CS203
Year / Semester	:	I / II	Section:	NIL	Total No. of Students : 52
No of Credits	:	4	Total No. of Contact Hours	:	4
Course Teacher (s) Name	:	Mrs.N.Anuradha	Corresponding lab Paper	:	Yes / No

Sl. No.	TOPIC	Reference / Text Book_Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
80.	Principles of Object-Oriented Programming-OOP Paradigm-Basic Concepts of OOP	T - 05	PPT	2	0	0	2
81.	Benefits of OOP-Beginning with C++-Tokens, Expressions and Control Structures	T – 10	PPT	2	0	0	2
82.	Tokens-Keywods-Identifiers and Constants-Data types-Symbolic Constants-Type Compatibility-Declaration of variables-Dynamic Initialization of Variables-Reference Variables	T – 29	PPT	2	0	0	2
83.	Operators-Scope Resolution operator-Member Dereferencing operators-Memory Managements Operators	T – 43	PPT	2	0	0	2
84.	Manipulators-Type Cast Operators-Expressions and Their types-Control structure	T - 50	PPT	2	0	0	2
85.	Functions in C++-Main Function-Function Prototyping-Call by Reference-Return by Reference	T – 69	PPT	2	0	0	2
86.	Inline –functions- Default Arguments-Constant Arguments-Friend function-Function Overloading	T – 73	PPT	2	0	0	2
UNIT – II							
87.	Specifying a Class-Defining member function	T – 90	PPT	2	0	0	2
88.	Making an outside function Inline	T – 97	PPT	2	0	0	2
89.	Nesting of member function-Private Member function	T – 97	PPT	2	0	0	2
90.	Arrays within a class-Memory Allocation for Objects	T – 99	PPT	2	0	0	2
91.	Static Data members-Static Member Objects-Constant Member Functions	T – 104	PPT	2	0	0	2
UNIT – III							

92.	Constructors-Parameterized Constructors-Multiple Constructors in a Class	T – 129	PPT	2	0	0	2
93.	Constructors with Default Arguments-Dynamic Initialization of objects-Copy Constructors-Dynamic Constructors	T – 136	PPT	2	0	0	2
94.	Constructing Two Dimensional Arrays-Constant Objects-Destructors	T – 142	PPT	2	0	0	2
95.	Operator Overloading and Type Conversion-Defining operator Overloading	T – 153	PPT	2	0	0	2
96.	Overloading Unary Operators-Overloading Binary Operators	T – 155	PPT	2	0	0	2
97.	Overloading Binary Operators Using Friends-Rules for Overloading Operators	T – 159	PPT	2	0	0	2
UNIT – IV							
98.	Inheritance: Extending Classes-Defining Derived Classes-Single Inheritance	T – 180	PPT	2	0	0	2
99.	Making a Private Number Inheritable-Multilevel Inheritance-Multiple Inheritance-Hybrid inheritance-Hierarchical Inheritance	T – 188	PPT	2	0	0	2
100.	Virtual Base Classes-Abstract Classes-Constructors in Derived Classes	T – 203	PPT	2	0	0	2
101.	Pointers, Virtual Functions and Polymorphism-Pointers-Pointers to Objects-This Pointer	T – 224	PPT	2	0	0	2
102.	Pointers to Derived Classes-Virtual Functions-Pure Virtual Functions	T – 243	PPT	2	0	0	2
103.	Managing Console I/O operations- Managing Output with Manipulations	T – 259	PPT	2	0	0	2
UNIT – V							
104.	Working with Files-Classes for File Stream Operations-Opening and Closing a File-End of File Detection	T – 288	PPT	2	0	0	2
105.	More About Open (): File modes-File Pointers and Manipulations	T – 298	PPT	2	0	0	2
106.	Sequential Input and Output Operations-Error handling	T – 301	PPT	2	0	0	2
107.	Updating a File-Exception Handling-Exception Handling Mechanisms	T – 307	PPT	3	0	0	3
108.	Throwing and Catching Mechanism-Rethrowing Exception-Specifying Exception	T – 347	PPT	3	0	0	3
TOTAL							60

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical
 * LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Text Book

T	Balagurusamy E(2018), Object Oriented Programming with C++, 7 th edition, Tata Mcgraw Hill, New Delhi.
---	---

Reference Books

R1	Joyce Farrell (2013), Object-Oriented Programming Using C++, 4 th edition, Cengage Learning India Pvt Ltd.
R2	Salaria.R.S(2012),Object-Oriented Programming using C++, Khanna Book Publishing-New Delhi

Web Resources

W1	https://www.tutorialspoint.com
W2	https://www.studytonight.com/operating-system/
W3	https://www.geeksforgeeks.org/operating-systems/

E – Books /Library INFLIBNET RESOURCES

E1	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/detail.action?docID=555011
E2	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/detail.action?docID=818960
E3	https://nlist.inflibnet.ac.in/search/Record/CR9781316534489

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	1	PPT	PPT	ADT creation using Structure	2

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	Unit - I, II, III (50%)	50%
2.	II INTERNAL	Unit – III (Remaining 50%) , IV, V	50%
3.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.N.Anuradha		
Programme Coordinator	Mrs.S.Nirmala Devi		

	Approved by		
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (EVEN SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Operating System

Course Code : 20CS204

Year / Semester : I / II

Section: NIL Total No. of Students : 52

No of Credits : 4

Total No. of Contact Hours : 4

Course Teacher (s) Name : Mrs.S.Nirmala Devi

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book_Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
1.	Introduction to Operating System, Computer System Organization	T - 04	PPT	2	0	0	2
2.	Computer System Architecture	T – 12	PPT	2	0	0	2
3.	Operating System Operations, Process Management	T – 21	PPT	2	0	0	2
4.	Memory Management, System structures	T – 25	PPT	2	0	0	2
5.	Operating System Services-User Operating System Interface	T - 53	PPT	2	0	0	2
6.	Operating System Design And Implementation- Operating System Structure	T - 73	PPT	2	0	0	2
UNIT – II							
7.	Process Concept- Process Scheduling	T – 103	PPT	2	0	0	2
8.	Operations on processes- Interprocess Communication	T - 113	PPT	1	0	0	1
9.	Process Scheduling: Basic Concepts- Scheduling Criteria.	T - 201	PPT	1	0	0	1
10.	Scheduling algorithms - FCFS, SJF	T - 206	PPT	2	0	0	2
11.	Priority, Round Robin Scheduling	T – 210	PPT	2	0	0	2
12.	Multilevel Queue Scheduling, Multilevel Feedback Queue Scheduling	T – 213	PPT	1	0	0	1
UNIT – III							
13.	Process coordination- synchronization- background	T – 253	PPT	1	0	0	1

14.	The Critical Section Problem- Peterson's Solution	T – 256	PPT	1	0	0	1
15.	Semaphores	T – 263	PPT	1	0	0	1
16.	Deadlocks: System Model	T – 311	PPT	1	0	0	1
17.	Deadlock Characterization	T – 313	PPT	1	0	0	1
18.	Methods For Handling Deadlocks	T – 318	PPT	1	0	0	1
19.	Deadlock Prevention	T – 319	PPT	2	0	0	2
20.	Deadlock Avoidance- Deadlock Detection	T – 323	PPT	2	0	0	2
21.	Recovery From Deadlocks	T – 333	PPT	2	0	0	2
UNIT - IV							
22.	Memory Management: Memory Management Strategies- Background	T – 345	PPT	2	0	0	2
23.	Swapping- Contiguous Memory Allocation	T – 352	PPT	2	0	0	2
24.	Segmentation, Paging	T – 358	PPT	2	0	0	2
25.	Structure of the Page Table	T – 372	PPT	2	0	0	2
26.	Virtual Memory Management: Background- Demand Paging	T – 389	PPT	2	0	0	2
27.	Copy-On-Write- Page Replacement-Basic Page Replacement	T – 400	PPT	2	0	0	2
28.	FIFO Page Replacement, Optimal Page Replacement	T – 401	PPT	2	0	0	2
29.	LRU Page Replacement, LRU Approximation Page Replacement	T – 408	PPT	2	0	0	2
UNIT - V							
30.	File System- File Concept - Access Methods	T – 455	PPT	2	0	0	2
31.	Mass storage structure- overview of mass storage structure	T – 539	PPT	2	0	0	2
32.	Disk Scheduling - FCFS, SSTF	T – 544	PPT	2	0	0	2

33.	SCAN, C-SCAN,LOOK, Selection of a Disk Scheduling Algorithm	T – 545	PPT	2	0	0	2
34.	I/O System: Overview, I/O Hardware	T – 575	PPT	1	0	0	1
35.	Application I/O Interface	T – 585	PPT	2	0	0	2
TOTAL							60

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Text Book

T	Abraham Silberschatz , Peter Baer Galvin , Greg Gagne, (2015) <i>Operating System Principles</i> , (9 th Edition), Wiley & Sons Pvt Ltd.
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Reference Books

R1	William Stallings, (2014), <i>Operating Systems: Internals and Design Principles</i> , (8 th Edition), Prentice-Hall India Publication.
R2	Thomas Anderson and Michael Dahlin, (2014), <i>Operating Systems: Principles and Practice</i> , (2 nd Edition),Recursive Books.

Web Resources

W1	https://www.tutorialspoint.com
W2	https://www.studytonight.com/operating-system/
W3	https://www.geeksforgeeks.org/operating-systems/

E – Books /Library INFLIBNET RESOURCES

E1	https://nlist.inflibnet.ac.in/search/Record/EBC4895113
E2	https://nlist.inflibnet.ac.in/search/Record/EBC5121164
E3	https://nlist.inflibnet.ac.in/search/Record/978-1-84628-718-3

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	III	online	PPT	Implementation of Bankers Algorithm	01

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	Unit - I, II, III (up to Semaphore)	50%
2.	II INTERNAL	Unit – III (from Deadlocks) , IV, V	50%
3.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.S.Nirmala Devi		
Programme Coordinator	Mrs.S.Nirmala Devi		

	Approved by		
	Name	Signature	Date
HoD	Mrs.N.Anuradha		

Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE
COURSE PLAN – 2020– 2021 (EVEN SEMESTER)

Name of the Programme :B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Operations Research

Year / Semester : I / II

No of Credits : 5

Course Teacher Name : Mr. S. Suriaprakash

Section: A & B

Course Code : 20OR206

Total No. of Students: 52

Total No. of Contact Hours : 5

Corresponding Lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							

1	Operations Research Introduction	T-1.1	BB/ WB/ OER	1	0	0	1
2	Meaning, Scope	T-1.3	BB/ WB/ OER	1	0	0	2
3	Linear Programming, Formulating a linear programming model	T-2.1	BB/ WB/ OER	3	1	0	6
4	graphical solutions	T-2.15	BB/ WB/ OER	2	1	0	9
5	standard form	T-3.1	BB/ WB/ OER	1	1	0	11
6	simplex method	T-3.9	BB/ WB/ OER	3	1	0	15
UNIT - II							
7	Introduction, Finding basic feasible solution for balanced Transportation model in Minimization case	T- 7.1	BB/ WB/ OER	2	1	0	3
8	North West Rule	T- 7.4	BB/ WB/ OER	1	1	0	5
9	Least Cost Method	T- 7.4	BB/ WB/ OER	1	1	0	7
10	Vogel's Approximation Method	T- 7.5	BB/ WB/ OER	2	1	0	10
11	Finding Optimal basic feasible solution for balanced Transportation model in Minimization case	T- 7.18	BB/ WB/ OER	1	0	0	11
12	North West Rule	T- 7.19	BB/ WB/ OER	1	0	0	12
13	Least Cost Method	T- 7.20	BB/ WB/ OER	1	0	0	13
14	Vogel's Approximation Method	T- 7.21	BB/ WB/ OER	1	1	0	15
UNIT - III							
15	Assignment Problems -Introduction	T-8.1	BB/ WB/ OER	1	0	0	1
16	Assignment Problem - Minimization case in balanced assignment model	T-8.5	BB/ WB/ OER	3	2	0	6
17	Minimization case in unbalanced assignment model	T-8.15	BB/ WB/ OER	2	1	0	9
18	Maximization case in assignment Problems	T-8.22	BB/ WB/ OER	2	1	0	12
19	Travelling salesman problem	T-8.33	BB/ WB/ OER	2	1	0	15
UNIT - IV							
20	Network Analysis-Introduction	T-15.1	BB/ WB/ OER	1	0	0	1
21	Some basic Concepts of network - Network construction	T-15.2	BB/ WB/ OER	1	0	0	2
22	Simple network problems - Critical path analysis network (CPM) - Critical path for forward and backward calculation	T-15.4	BB/ WB/ OER	3	2	0	5

23	Float definition - Types of float - Simple problems to find float	T-15.17	BB/ WB/ OER	2	1	0	8
24	Introduction on PERT	T-15.28	BB/ WB/ OER	2	1	0	11
25	Statistical consideration in PERT – Simple problems.	T-15.29	BB/ WB/ OER	2	2	0	15
UNIT - V							
26	Game theory-Theory of Games	T-16.1	BB/ WB/ OER	1	0	0	1
27	Characteristics – Pure Strategies – Saddle Point – Value of the game	T-16.3	BB/ WB/ OER	2	1	0	4
28	Mixed Strategies – Rules of Dominance	T-16.20	BB/ WB/ OER	2	1	0	7
29	Two Persons Game	T-16.7	BB/ WB/ OER	2	1	0	10
30	3 x 3 persons game	T-16.14	BB/ WB/ OER	1	1	0	12
31	Graphical Solutions of 2 x M and N x 2 game	T-16.21	BB/ WB/ OER	2	1	0	15
Total							75

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included. [Mark the abbreviation in the teaching aids column]

Text Book

T	Sundaresan V (2013) Resource Management Techniques. A.R.Publications
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Reference Books

R1	HamdyA.T (2011), Operations Research, Pearson publications
R2	Kanti S(2010), Operation Research, Sultan Chand and sons

Web Resources

W	https://mathworld.wolfram.com/
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E – Books /Library INFLIBNET RESOURCES

E	https://www.mbamcq.com/operations-research/
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COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

<u>Sl.NO</u>	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1	I INTERNAL	Unit - I, II, III (50%)	50%
2	II INTERNAL	Unit – III (50%) , IV, V	50%
3	End Semester Examination	Unit I to V	100%

Prepared by

Designation	Name	Signature	Date
Course Coordinator / In-charge	Mr. S. Suriaprakash		
Programme Coordinator			

Approved by

Designation	Name	Signature	Date
HoD	Mr. R. Sivasubramanian		

Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2021 – 22 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Python Programming Lab

Course Code : 20CS306 P

Year / Semester : II / III

Section: A & B Total No. of Students : 52

No of Credits : 2

Total No. of Contact Hours : 4

Course Teacher (s) Name : Mrs.N.Anuradha

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery			Cumulative Hours
				L	T	P	
UNIT - I							
1.	Simple python programs	NA	PPT, T	0	0	3	4
2.	Program using operators in Python	NA	PPT, T	0	0	3	4
3.	Program using control structures in Python	NA	PPT, T	0	0	3	4
4.	Program using Tuples in Python	NA	PPT, T	0	0	3	4
5.	Program using built in functions in python	NA	PPT, T	0	0	3	4
6.	Python program using user defined functions	NA	PPT, T	0	0	3	5
7.	Python program using object oriented concepts	NA	PPT, T	0	0	3	5
8.	Python program using Regular Expressions	NA	PPT, T	0	0	3	5
9.	Python GUI Programming	NA	PPT, T	0	0	3	5
10.	Python - MySQL Database Access	NA	PPT, T	0	0	3	5
TOTAL							45

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) , Notepad (NP) , Browser (B), Linux Server(LS), Telnet(T) any other tools may also be included [Mark the abbreviation in the teaching aids column].

Text Book

T1	NA
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Reference Books

R1	NA
R2	NA

Web Resources

W1	https://www.w3schools.com/python/
W2	https://www.tutorialspoint.com/python/index.htm

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	1 - 5 Exercises	50%
2.	II INTERNAL	6 - 10 Exercises	50%
3.	End Semester Examination	10 Exercises	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.N.Anuradha		
Programme Coordinator	Mrs.S.Nirmala Devi		

Approved by			
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 2021 (EVEN SEMESTER)

Name of the Programme: B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Introduction to Computer Network

Course Code : 20CS207

Year / Semester : I / II

Section: NIL

Total No. of Students : 52

No of Credits : 2

Total No. of Contact Hours : 3

Course Teacher (s) Name: Mr. J. Rajkumar

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book_Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
109	Introduction	T – 01	PPT	1	0	0	1
110	Network Hardware , Software	T – 17	PPT	1	0	0	1
111	Reference Models	T – 29	PPT	1	0	0	1
112	OSI and TCP/IP Models	T – 41	PPT	1	0	0	1
113	Example Networks	T – 54	V & BB	1	0	0	1
114	Wireless LAN, RFID and Sensor Network	T – 73	V & GD	1	0	0	1
UNIT – II							
115	Data Link Layer	T – 194	PPT	1	0	0	1
116	Design issues	T – 195	PPT	1	0	0	1
117	Error Detection & Correction	T – 205	OER	1	0	0	1
118	Elementary Data Link Layer Protocols	T – 215	PPT	1	0	0	1
119	Sliding Window Protocols	T – 226	PPT	2	0	0	2
UNIT – III							

120	Network layer	T – 355	PPT	1	0	0	1
121	Design issues, Routing Algorithms	T – 356-364	OER	1	0	0	1
122	Congestion Control algorithms	T – 392	PPT	1	0	0	1
123	Quality of Service, Network layer of Internet	T - 404,437	PPT	1	0	0	1
124	IP Protocol , IP Address	T- 438	PPT	1	0	0	1
125	Internet Control Protocol	T- 465	V & GD	1	0	0	1
UNIT – IV							
126	Introduction, Transport Layer Protocols	T – 495	PPT	1	0	0	1
127	Services	T – 520	PPT	1	0	0	1
128	Port Number	T – 522	PPT	1	0	0	1
129	User Datagram Protocol	T – 430	PPT	1	0	0	1
130	Transmission Control Protocol	T – 552	V & GD	1	0	0	1
131	Stream Control Transmission Protocol (SCTP)	T – 563	V & GD	1	0	0	1
UNIT – V							
132	Domain Name System (DNS)	T – 611	PPT	1	0	0	1
133	Email	T – 623	OER	1	0	0	1
134	World Wide Web (WWW)	T – 646	PPT	1	0	0	1
135	Hyper Text Transport Protocol (HTTP)	T – 683	PPT	1	0	0	1
136	Streaming Audio	T – 697	V & GD	1	0	0	1
137	Streaming Video	T – 698	V & GD	1	0	0	1

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical
 * LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.
 [Mark the abbreviation in the teaching aids column]

Text Book

T	8) Tanenbaum A.S, 2011, Computer Networks, Fifth Edition, Pearson Education, Inc.
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Reference Books

R1	9) Forouzan B, 1998, Introduction to Data Communications in Networking, Tata McGraw Hill, New Delhi.
R2	10) Halsall F, 1995, Data Communications, Computer Networks and Open Systems, Addison Wesley. Larmarca, 2002

Web Resources

W1	https://www.tutorialspoint.com
W2	https://www.guru99.com/basic-computer-network.html
W3	http://peasonhighered.com/tanenbaum

E – Books /Library INFLIBNET RESOURCES

E1	http://intronetworks.cs.luc.edu/current2/ComputerNetworks.pdf
E2	https://www.researchgate.net/publication/317003155_A_Practical_Guide_to_Computer_Network_and_Internet_Technologies
E3	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/detail.action?docID=5218413

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	1	PPT	PPT	Analysis of Computer Network Information Based on "Big Data"	2

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	Unit - I, II, III (50%)	50%
2.	II INTERNAL	Unit – III (Remaining 50%) , IV, V	50%
3.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mr.J.Rajkumar		
Programme Coordinator	Mrs.S.Nirmala Devi		

	Approved by		
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Linux Lab

Course Code : 20CS208

Year / Semester : I / II

Section: NIL Total No. of Students : 52

No of Credits : 2

Total No. of Contact Hours : 4

Course Teacher (s) Name : Mrs.S.Nirmala Devi

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery			Cumulative Hours
				L	T	P	
UNIT - I							
1.	File & Multiple File Commands	NA	PPT, LS, T	0	0	3	3
2.	Directory Commands	NA	PPT, LS, T	0	0	3	3
3.	File Listing Commands	NA	PPT, LS, T	0	0	4	4
4.	File Permission Commands	NA	PPT, LS, T	0	0	4	4
5.	File Searching Commands	NA	PPT, LS, T	0	0	4	4
6.	General purpose utility commands	NA	PPT, LS, T	0	0	4	4
7.	Redirection	NA	PPT, LS, T	0	0	4	4
8.	Pipes & Filters	NA	PPT, LS, T	0	0	3	3
9.	Process Status & Find Process Commands	NA	PPT, LS, T	0	0	3	3
10.	Monitoring memory and Processor Commands	NA	PPT, LS, T	0	0	3	3
11.	Design a shell script to customize any 10 Linux commands	NA	PPT, LS, T	0	0	3	3
12.	Design a shell script to customize login screen	NA	PPT, LS, T	0	0	4	4
13.	Design a shell script to compress & decompress a file	NA	PPT, LS, T	0	0	4	4

14.	Design a shell script to implement multitasking	NA	PPT, LS, T	0	0	4	4
TOTAL							50

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) , Notepad (NP) , Browser (B), Linux Server(LS), Telnet(T) any other tools may also be included [Mark the abbreviation in the teaching aids column].

Text Book

T1	NA
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Reference Books

R1	NA
R2	NA

Web Resources

W1	https://www.w3schools.com
W2	https://www.tutorialspoint.com

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
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1.	I INTERNAL	1 - 7 Exercises	50%
2.	II INTERNAL	8 - 14 Exercises	50%
3.	End Semester Examination	14 Exercises	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.S.Nirmala Devi		
Programme Coordinator	Mrs.S.Nirmala Devi		

	Approved by		
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN - 2020 - 21 (EVEN SEMESTER)

Name of the Programme :	B.Sc., CS(SSS)	Programme Code :	CS1002
Course Name :	Environmental Studies	Course Code :	20ES210
Year / Semester	I /II	Section	A & B
Total No. of Students	52	No. of Credits	2
Corresponding lab Paper	NO.	Total No. of Contact Hours	30
Course Teacher Name	Mr. J. RAJKUMAR		

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I							
138.	Introduction to environmental studies Multidisciplinary nature of environmental studies	T1-3	<u>PPT</u>	2			2
139.	Scope and importance; Concept of sustainability and sustainable development	T1-3-5	<u>PPT</u>	1			1
UNIT – II							
140	Ecosystems –Self Study (Assessment in terms of Assignment only)-What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession	T1-54-56	v	1			1
141	Case studies of the following ecosystems: a) Forest ecosystem b) Grassland ecosystem c) Desert ecosystem d) Aquatic ecosystems (ponds/ streams/ lakes/ rivers/ oceans/estuaries)	T1-65-75	v	1			1
UNIT – III							
142.	Natural Resources : Renewable and Non-renewable Resources -Land resources and land use change; Land degradation, soil erosion and desertification	T1-20-22	<u>PPT</u>	2			2
143.	Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations	T1-23	<u>PPT</u>	1			1
144.	Water : Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state).	T1-26	<u>PPT</u>	1			1

145.	Energy resources : Renewable and non renewable energy sources, use of alternate energy sources, growing energy needs.	T1-35	<u>PPT</u>	1			1
UNIT – IV							
146	Biodiversity and Conservation Self Study (Assessment in terms of Assignment only)-Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots	T1-82-83	BB	1			1
147	India as a mega-biodiversity nation; Endangered and endemic species of India -Threats to biodiversity : Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity	T1-89	BB	1			1
148	Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.	T1-84-88	BB	1			1
UNIT – V							
149	Environmental Pollution	T1-112	V	1			1
150	Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution	T1-113-140	V	2			2
151	Nuclear hazards and human health risks	T1-143	V	1			1
152	Solid waste management : Control measures of urban and industrial waste. • Pollution case studies.	T1-145	V	1			1
UNIT – VI							
153	Environmental Policies & Practices-Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture	T1-182-186	BB	2			2
154	Environment Laws: Environment Protection Act; Air	T1-193-199	BB	2			2

	(Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).						
155	Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.	T1-23	BB	2			2
UNIT – VI							
156	Human Communities and the Environment • Human population growth: Impacts on environment, human health and welfare. • Resettlement and rehabilitation of project affected persons; case studies. • Disaster management : floods, earthquake, cyclones and landslides.	T1-214,156,172	BB	2			2
157	Environmental movements : Chipko, Silent valley, Bishnois of Rajasthan	W2	PPT	1			1
158	Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.	T1-237	BB	1			1
159	Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi).	T1-122-123	BB	2			2
TOTAL HOURS							30

L – Lecture T – Tutorial (Problems / Example Programs / Revision Classes) P – Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included. [Mark the abbreviation in the teaching aids column]

Text Book

13. Bharucha, E. (2004). *Environmental Studies For Undergraduate Courses of all Branches of Higher Education*. New Delhi: University Grants Commission.

Reference Books

14. Agarwal KC, 2001. *Environmental Biology*, Nidi Publishers Ltd. Bikaner.

Web Resources

1. <https://www.ugc.ac.in/oldpdf/modelcurriculum/env.pdf>
2. <https://www.clearias.com/environmental-movements-in-india/>

E – Books /Library INFLIBNET RESOURCES

1. <https://www.ugc.ac.in/oldpdf/modelcurriculum/env.pdf>

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	Forest products	Assignment	2hrs	HB

* Proposed Actions can be Assignments, Seminars, Peer Teaching, Industrial Visit, Others (if any)

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

SL.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	1	Lecture	PPT	Rainwater Harvesting	2

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	Unit-1	20%
2.	I INTERNAL	Unit - I,II,III,IV(Topic 1-2)	50%
3.	II INTERNAL	Unit – IV(Topic3),V,VI,VII	50%
4.	End Semester Examination	All Seven Units	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mr. J. Rajkumar		
Programme Coordinator	Mrs. S. Nirmala Devi		

Approved by			
	Name	Signature	Date

HoD	Mrs. N. Anuradha		
Dean Academics	Dr. S. Priya		
Principal	Dr. R. Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN - 2020 - 21 (ODD/EVEN SEMESTER)

63. Name of the Programme :	64. ANI/VIS/CS/NET/MCHM/FSPM		
65. Course Name :	66. General Tamil IV	67. Course Code :	68. 19UT401

69. Year / Semester	70. II / IV	71. Section	72.
73. Total No. of Students	74. 36	75. No. of Credits	76. 3
77. Corresponding lab Paper	78. Yes / No.	79. Total No. of Contact Hours	80. 45
81. Course Teacher Name	82.		

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I							
1	நற்றிணை-விளையாடு ஆயமொடு	1	BB	2			2
2	குறுந்தொகை- நிலத்தினும் பெரிதே,அகவன் மகளே	3	BB	2			2
3	புறநானூறு- உண்டால் அம்ம,உற்றுழிஉதவியும்	4	BB	2			2
	சிறுபாணாற்றுப்படை -திறவாக் கண்ண	7	BB	3			3
UNIT – II							
	திருக்குறள்-அன்புடைமை (பத்து குறட்பாக்கள்)	CM/10	BB	2			3
	நாலடியார் -கல்வி – முதல் ஐந்து பாடல்கள்	CM/13	BB	2			3
	முதுரை-முதல் ஐந்து பாடல்கள் மட்டும்	CM/15	BB	2			3
UNIT – III							
	புதின இலக்கியம் -சப்பரம்	CM/16	BB	2			9
UNIT – IV							

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
	வழுஉச் சொற்களை நீக்குதல்	CM/65	BB	3			3
	பிறமொழிச் சொற்களை நீக்குதல்	CM/67	BB	3			3
	சொற்பிரிப்புப் பிழைகளை நீக்குதல்	CM/69	BB	3			3
UNIT – V							
	சங்க இலக்கியம் ஓர் அறிமுகம்	CM/72	BB	3			3
	புதினங்களின் தோற்றமும் வளர்ச்சியும்	CM/75	BB	3			3
	கடித வகைகள் எழுதுதல்	-	BB	3			3
TOTAL HOURS							45

L – Lecture T – Tutorial (Problems / Example Programs / Revision Classes) P – Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included. [Mark the abbreviation in the teaching aids column]

Course Material

83. பொதுத்தமிழ்-IV– பாடநூல் தொகுப்பு கல்லூரித் -தமிழ்த்துறை வெளியீடு

Reference Books

1. சங்க இலக்கியம்,எட்டுத்தொகை,நியூசெஞ்சுரி புக் ஹவுஸ்,சென்னை. டிசம்பர் 2010
2. பதினெண் கீழ்க்கணக்கு நூல்கள்,சாரதா பதிப்பகம்,கௌரா ஏஜன்சீஸ்,சென்னை. டிசம்பர் 2012
3. சப்பரம்,சுப்பரபாரதிமணியன், நியூ செஞ்சுரி புக் ஹவுஸ்,சென்னை. ஜூலை 2015
4. தமிழ் நடைக் கையேடு,தமிழ்ப் பல்கலைக்கழகம்,தஞ்சாவூர்-அடையாளம் பதிப்பகம்,புத்தானத்தம்.டிசம்பர் 2015

5. தமிழ் இலக்கிய வரலாறு, மு.வரதராசன், சாகித்திய அகாதெமி, சென்னை. டிசம்பர் 2015 தண்டியலங்காரம்.சைவ சித்தாந்த நூற் பதிப்புக் கழக வெளியீடு,சென்னை: 1976.Print.

6. தமிழ் இலக்கிய வரலாறு-1 .மது.ச.விமலானந்தம். முல்லை நிலையம், சென்னை: 1976.Print.

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	செய்தித்தாள்கள் வாசித்தல்		2	(HB)
2.	புத்தகம் வாசித்தல்		2	(HB)

* Proposed Actions can be Assignments, Seminars, Peer Teaching, Industrial Visit, Others (if any)
COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

SL.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	1	Assignment	2	கட்டுரை எழுதுதல்	2
2		Seminar	2	புத்தகம் வாசித்து விமர்சனம் செய்தல்	2
3	2	Peer teaching	2	நடைமுறை நிகழ்வுகளை கலந்தாலோசித்தல்	2

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	Unit – I	20%
2.	I INTERNAL	Unit – I, II, III (up to -----)	40%
3.	II INTERNAL	Unit – III (from -----) , IV, V	40%

4.	End Semester Examination	Unit I to V	100%
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Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	N . SELVI		

Approved by			
	Name	Signature	Date
HoD	Mrs . N . SELVI		
Dean Academics	Dr.S.PRIYA		
Principal	Dr.R.SUJATHA		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN - 2020 - 21 (EVEN SEMESTER)

7. Name of the Programme :	8. B.Sc Animation, Viscom, CS, Networking, Food Science & Processing, Fire & Industrial Safety and Marine Catering Hotel Management, B.Com B&I, Honors and ACCA		
10. Course Name :	11. Hindi IV	12. Course Code :	13. 19UH401
14. Year / Semester	15. II / IV	16. Section	17.
18. Total No. of Students	19. 6	20. No. of Credits	21. 3
22. Corresponding lab Paper	23. No	24. Total No. of Contact Hours	25. 45
26. Course Teacher Name	27. Mrs.S.Neela		

Sl. No.	TOPIC	Course Material Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I हन्दीसाहत्याका इतहस History of Ancient and medieval Hindi literature							
1	आदकाल Adhikaal - Prithviraj raso.	CM-02	BB / PPT	3	2		5
2	भक्तकाल Bhakthikaal – Nirgun Bakthi and Sagun Bakthi	CM-7	BB / PPT	2	2		4
UNIT – II - नैतक कवत्याएं (Ethical poem)							
3	कठ-पुतली है या जीवन है (kttputhleehaiyajeevanhai)	CM-9	BB / PPT	1	1		2
4	माँ (Maa)	CM-10	BB / PPT	1	1		2
5	एक आशीर्वाद (Eakhaasheervadh)	CM-11	BB / PPT	1	1		2
UNIT – III - व्याकरण (Grammar)							
9	क्रया verb	CM-13	BB / PPT	3	1		4
10	संबंध बोधक sambandhbodhak	CM-14	BB / PPT	3	1		4

Sl. No.	TOPIC	Course Material Page No	*Teaching Aids	Mode of Delivery			Cumulative Hours
				No	of	Hours	
11	समुच्चय बोधक samuchayabodhak	CM-15	BB / PPT	2	1		3
UNIT – IV - पर्यटन - Tourism							
12	रामेश्वरम - Rameshwaram	CM-16	BB / PPT	1	1		2
13	ताजमहल - The Taj Mahal	CM-17	BB / PPT	1	1		2
14	मदुरै - Madurai	CM-17	BB / PPT	1	1		2
15	श्रीनगर - Shri Nagar	CM-18	BB / PPT	1	1		2
16	कन्याकुमारी - Kanyakumari	CM-19	BB / PPT	1	1		2
UNIT – V – अनुवाद - Translation							
17	हिन्दी से अंग्रेज़ी में अनुवाद	CM-15	BB / PPT	8	1		9
TOTAL HOURS							45

L – Lecture T – Tutorial (Problems / Example Programs / Revision Classes) P – Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included. [Mark the abbreviation in the teaching aids column]

Course Material

15.

the syllabus prepared by the Department of Hindi.

Hindi IV. A Compiled book, covering all the topics of

Reference Books

28. Webliography

http://archive.mu.ac.in/myweb_test/TYBA%20study%20material/Hindi%20Sahitya%20Ka%20Etahas.pdf

29. हन्दि प्रचार वाहनी-3 दक्षणि भारत हन्दि प्रचार सभा, मद्रास हन्दि प्रचार प्रेस त्यागराय नगर, चेन्नै:17पहला संस्करण- अक्तूबर,2018 दूसरा संस्करणजुलाई,2019: मुद्रक |Page nos. 14, 15, 18
30. R.Janakaja, Shabari Hindi vyakaran, Shabari Book House,37-First agrahaaram,Salem, First edition -2005:Print
31. Dr.K.M.Chandra Mohan. Hindi Vatayan. Viswavidhalaya Prakasan Chowk, Varanasi-221001:Print
32. प्रश्नोत्तर सहति मध्यमा पाठ्य सामग्री, दक्षणि भारत हन्दि प्रचार सभा, हन्दि प्रचार प्रेस ,चेन्नै:17,पहला संस्करण- जून, 2018नौवाँ पुनरमुद्रण – जून , 2019: मुद्रक | Pages no. 177 and 178 (1 to 6)

Gaps in the Syllabus

SL. NO	Name of the Topic	Proposed Action	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	Speaking Skill – Self Introduction		2	HT
2.	Reading Skill – Reading Activity		2	HT
3.	Speaking Skill – Assignment		1	HB

* Proposed Actions can be Assignments, Seminars, Peer Teaching, and Industrial Visit, Others (if any)

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	Unit – IV	20%
2.	I INTERNAL	Unit – I(Chapter 1), IV, V	50%
3.	II INTERNAL	Unit – I (Chapter 2) , II, III	50%
4.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	S.Neela		

Approved by			
	Name	Signature	Date
HoD	S.Neela		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (ODD/EVEN SEMESTER)

33. Name of the Programme:	34. B.Sc Animation, Viscom, CS, Networking, Food Science & Processing, and Fire & Industrial Safety		
35. Course Name:	36. General English IV	37. Course Code:	38. 19UGE402
39. Year / Semester	40. IV	41. Section	42.
43. Total No. of Students	44. 42	45. No. of Credits	46. 3
47. Corresponding lab Paper	48. No	49. Total No. of Contact Hours	50. 45
51. Course Teacher Name	52. Mr. C. Senthil Kumar		

Sl. No.	TOPIC	Course Material Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I–INTRODUCTION TO COMMUNICATION							
1	Introduction	1 to 3	BB / PPT	1	1		2
2	Barriers & Types	3 to 5	BB / PPT	2	1		3
3	7C's of Communication	5 to 7	BB / PPT	2	2		4

Sl. No.	TOPIC	Course Material Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
UNIT – II - WRITING							
4	Resume Etiquettes	8 to 9	BB	3			3
5	Resume Writing	9 to 10	BB	3			3
6	Report Writing	10 to 14	BB	3			3
UNIT – III - BODY LANGUAGE							
7	Introduction: Body Language	15 to 16	VIDEO	2	1		2
8	Importance of Body Language in a Professional Atmosphere	16 to 18	VIDEO	2	1		3
9	Do's & Don'ts: Body Language	19 to 40	VIDEO	2	2		4
UNIT – IV - PRESENTATION							
10	Presentation & Its Types	41 to 43	VIDEO	3			3
11	Do's & Don'ts: Presentation Skills	43 to 46	VIDEO	3			3
12	Exercises on Presentation	47 to 49	VIDEO	3			3
UNIT – V – SENTENCE CORRECTION							
13	Correct Usage of Verbs & Adverbs – Definition – Rules.	50 to 52	BB / WS	2	1		3
14	Correct Usage of Preposition: Definition – Rules.	53 to 57	BB / WS	2	1		3
15	Correct Usage of Conjunction & Interjection: Definition	57 to 61	BB /	2	1		3

Sl. No.	TOPIC	Course Material Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
	- Rules		WS				
TOTAL HOURS							45

L – Lecture T – Tutorial (Problems / Example Programs / Revision Classes) P – Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included. [Mark the abbreviation in the teaching aids column]

Course Material

16. **General English IV.** A Complied book, covering all the topics of the syllabus prepared by the Department of English.

Reference Books

17. Frank Brothers & Co. Ltd, 2004. Print. SrivasanHema. **Communication Skills.** Bangalore:
18. **Composition.** India: S.Chand& Company Ltd, 1995. Print. Wren & Martin. **High School English Grammar &**
19. **and Composition.** Bangalore: Emerald Publisher, 1998. Print. G.RadhakrishnaPillai. **Emerald English Grammar**
20. Company Ltd, 1997. Print. Dr.K.Alex. **Soft Skills.** New Delhi: S.Chand&
21. Dr. Gupta C.B. Business Correspondence & Reporting -Business Law, Business Correspondence & Reporting (CA-Foundation). New Delhi: Taxmann, 2018. Print.

22. A.P.Bhardwaj. **General English for Competitive Examinations**. New Delhi: Dorling Kindersley (India) Pvt. Ltd, 2013. Print.
23. Michael Swan. **Practical English Usage**. New Delhi: Oxford University Press, 2008. Print
24. Randolph Quirk, Sidney Greenbaum, Geoffrey Leech, Jan Svartvik. **A Comprehensive Grammar of the English Language**. New Delhi: Dorling Kindersley (India) Pvt. Ltd, 2010. Print.
25. John Adair. **The Effective Communicator**. Noida: Anubha Printers. 2005. Print.

E – Books /Library INFLIBNET RESOURCES

26. <https://nlist.inflibnet.ac.in/search/Record/EBC483375>
27. <https://nlist.inflibnet.ac.in/search/Record/EBC481114>
28. <https://nlist.inflibnet.ac.in/search/Record/EBC1864716>

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	Speaking Skill – Self Introduction		3	HT
2.	Reading Skill – Reading Activity		2	HT
3.	Speaking Skill – Assignment		1	HB

* Proposed Actions can be Assignments, Seminars, Peer Teaching, Industrial Visit, Others (if any)

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

SL.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted

1	1		Newspaper	Report writing Skills – Newspaper	1
2	2		Video Presentation	Professional Skills – Body language	1
3	3		Video Presentation	Professional Presentation Skills	1

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	Unit – I, II	40%
2.	II INTERNAL	Unit – III, IV	40%
3.	SLIP / CLASS TEST	Unit – V	20%
4.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	C. Senthil Kumar		

Approved by			
	Name	Signature	Date
HoD	R.Suganthi Hepzibha		
Dean Academics	Dr.S.Priya		

UNIT - I							
1.	Database – System Applications - Purpose of Database systems	T1-1	PPT	1	0	0	1
2.	View of data - Data Abstraction - Instances and Schemas	T1-6	PPT	1	0	0	2
3.	Data Models	T1-8	PPT	1	0	0	3
4.	Database languages - DML - DDL	T1-9	PPT	1	0	0	4
5.	Database Design - Design Process	T1-15	PPT	1	0	0	5
6.	The Entity Relationship Model	T1-17	PPT	1	0	0	6
7.	Normalization	T1-18	PPT	1	0	0	7
8.	Data storage and querying	T1-20	PPT	1	0	0	8
9.	Transaction management	T1-22	PPT	1	0	0	9
10.	Database Architecture	T1-23	PPT	1	0	0	10
11.	Database Users and Administrators	T1-27	PPT	1	0	0	11
12.	Relational Model: Structure of Relational Databases - Keys	T1-39	PPT	1	0	0	12
13.	Relational Operations	T1-48	PPT	1	0	0	13
UNIT – II							
14.	ER model - Entity Set - Relationship Set - Attributes	T1-262	PPT	1	0	0	14
15.	Constraints - Mapping Cardinalities - Participation constraints	T1-269	PPT	1	0	0	15
16.	ER Diagrams	T1-274	PPT	1	0	0	16
17.	Relational Database Design: Atomic Domains and First Normal Form	T1-327	PPT	1	0	0	17
18.	Decomposition using Functional Dependencies - Keys and Functional Dependencies	T1-329	PPT	1	0	0	18
19.	Boyce-Codd Normal Form	T1-333	PPT	1	0	0	19

20.	BCNF and Dependency Preservation	T1-334	PPT	1	0	0	20
21.	Third Normal Forms	T1-336	PPT	1	0	0	21
22.	Decomposition using Multivalued dependencies - Multivalued dependencies	T1-355	PPT	1	0	0	22
23.	Fourth Normal Form	T1-358	PPT	1	0	0	23
24.	SQL: Data Definition - Basic Types - Basic Schema Definition	T1-58	PPT	1	0	0	24
25.	Basic structure of SQL queries - Queries on Single Relations - Queries on Multiple Relations	T1-63	PPT	1	0	0	25
26.	Set Operations - Union Operation - Intersect Operation - Except Operation	T1-79	PPT	1	0	0	26
27.	Aggregate functions- Basic Aggregation - Aggregation with Grouping - Having clause	T1-84	PPT	1	0	0	27
28.	Modification of the database - Deletion - Insertion - Update	T1-98	PPT	1	0	0	28
UNIT - III							
29.	File Organization - Fixed Length Records	T1-451	PPT	1	0	0	29
30.	Variable Length Records	T2-454	PPT	1	0	0	30
31.	Organization of records in Files	T1-457	PPT	1	0	0	31
32.	Sequential File Organization	T1-458	PPT	1	0	0	32
33.	Multiple Clustering File Organization	T1-460	PPT	1	0	0	33
34.	Data dictionary storage	T1-462	PPT	1	0	0	34
35.	Indexing and Hashing: Basic concepts	T1-475	PPT	1	0	0	35
36.	Ordered Indices - Dense and Sparse Indices - Multilevel Indices	T1-476	PPT	2	0	0	37
37.	Query Processing: Overview - Measures of Query cost	T1-537	PPT	2	0	0	39
UNIT - IV							

38.	Transaction Concept	T1-627	PPT	1	0	0	40
39.	A simple transaction model	T1-629	PPT	1	0	0	41
40.	Storage Structure	T1-632	PPT	1	0	0	42
41.	Transaction Atomicity and Durability	T1- 633	PPT	1	0	0	43
42.	Concurrency Control: Lock Based Protocols - Locks	T1- 661	PPT	1	0	0	44
43.	Granting of locks	T1-666	PPT	1	0	0	45
44.	Two Phase locking Protocol	T1-667	PPT	1	0	0	46
45.	Implementation of Locking	T1-670	PPT	1	0	0	47
46.	Graph Based Protocol	T1-671	PPT	1	0	0	48
47.	Deadlock Prevention	T1-675	PPT	1	0	0	49
48.	Deadlock Detection and Recovery	T1-676	PPT	2	0	0	51
UNIT - V							
49.	Failure Classification	T2-721	PPT	2	0	0	53
50.	Storage ,Recovery and Atomicity - Log Record	T2-722	PPT	2	0	0	55
51.	Database modification	T2-728	PPT	1	0	0	56
52.	Concurrency Control and Recovery	T2-729	PPT	2	0	0	58
53.	Transaction Commit	T2-730	PPT	1	0	0	59
54.	Remote backup System	T2-756	PPT	1	0	0	60
TOTAL							60

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Text Books

T1	Silberschatz Abraham, F.Korth Henry,S.Sudarshan, 2013,Database System Concepts,6 th Edition, McGraw Hill Education(India) Private Limited
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Reference Books

R1	M. Kroenke David, Auer David, 2014, Database Concepts, 7th Edition, Prentice Hall.
R2	Adamski Joseph J,2011,Concepts of Database Management,7th Edition, Cengage Learning publication

Web Resources

W1	https://www.javatpoint.com/dbms-tutorial
W2	https://www.geeksforgeeks.org/introduction-of-dbms-database-management-system-set-1/
W3	https://www.guru99.com/what-is-dbms.html
W4	https://www.tutorialspoint.com/dbms/index.htm

E – Books /Library INFLIBNET RESOURCES

E1	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=
E2	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=5050193&query=
E3	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	Relational Algebra	PPT	2	HB

* Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

SL.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1.	5	PPT	PPT	Data Mining	2

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	Unit - I, II, III (2.5 UNITS)	50%
2.	II INTERNAL	Unit – III,IV,V(2.5 UNITS)	50%
3.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.J.Varalakshmi		

Programme Coordinator	Mrs.S.Nirmala Devi		
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Approved by			
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (EVEN SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Penetration Testing Fundamentals Course Code : 19CS404

Year / Semester : II / IV Section: NIL Total No. of Students : 42

No of Credits : 4 Total No. of Contact Hours : 4

Course Teacher (s) Name : Mrs.V.Gayathri Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours	Cumulative Hours

				L	T	P	
UNIT - I							
1.	Introduction to Ethical Hacking , Gathering Target Information-Introduction to Ethical Hacking-Defining Ethical Hacking	T - 2	PPT	1	0	0	1
2.	Understanding the Purpose of Ethical Hacking -An Ethical Hacker’s Skill Set - Ethical Hacking Terminology	T – 3	PPT	1	0	0	1
3.	The Phases of Ethical Hacking -Identifying Types of Hacking Technologies	T – 8	PPT	2	0	0	2
4.	Identifying Types of Ethical Hacks - Understanding Testing Types	T – 12	PPT	1	0	0	1
5.	Gathering Target Information: Reconnaissance, Footprinting, and Social Engineering-Reconnaissance - Understanding Competitive Intelligence	T - 33	PPT	2	0	0	2
6.	Information-Gathering Methodology -Footprinting-Using Google to Gather Information -Understanding DNS Enumeration -Understanding Whois and ARIN Lookups -Identifying Types of DNS Records -Using Traceroute in Footprinting-Understanding Email Tracking -Understanding Web Spiders	T - 37	PPT	2	0	0	2
7.	Social Engineering - The Art of Manipulation - Types of Social Engineering-Attacks - Social-Engineering Countermeasures	T-48	PPT	2	0	0	2
UNIT – II							
8.	Gathering Network and Host Information, System Hacking ,Trojans, Backdoors, Viruses, and Worms -Gathering Network and Host Information: Scanning and Enumeration	T – 64	PPT	1	0	0	1
9.	Scanning -The CEH Scanning Methodology -Ping Sweep Techniques -Nmap Command Switches -Scan Types -TCP Communication Flag Types -War-Dialing Techniques -Banner Grabbing and OS Fingerprinting Techniques -Scanning Anonymously	T - 67	PPT	2	0	0	2
10.	Enumeration -Null Sessions -SNMP Enumeration	T - 82	PPT	2	0	0	2
11.	System Hacking: Password Cracking, Escalating Privileges, and Hiding Files - The Simplest Way to Get a Password -Types of Passwords -Passive Online Attacks ,Active Online Attacks ,Offline Attacks ,Nonelectronic Attacks	T - 95	PPT	2	0	0	2
12.	Cracking a Password - Understanding the LAN Manager Hash - Redirecting the SMB Logon to the Attacker -SMB Relay MITM Attacks and Countermeasures -	T –102	PPT	2	0	0	2

	Password-Cracking Countermeasures						
13.	Understanding Keyloggers and Other Spyware Technologies -Escalating Privileges -Executing Applications ,Buffer Overflows	T – 109	PPT	2	0	0	2
14.	Understanding Rootkits -Planting Rootkits on Windows 2000 and XP Machines ,Rootkit Countermeasures	T- 112	PPT	2	0	0	2
15.	Hiding Files -NTFS File Streaming -NTFS Stream Countermeasures - Understanding Steganography Technologies -Covering Your Tracks and Erasing Evidence	T- 113	PPT	2	0	0	2
16.	Trojans, Backdoors, Viruses, and Worms-Trojans and Backdoors -Overt and Covert Channels - Types of Trojans - Trojan Construction Kit and Trojan Makers - Trojan Countermeasures	T-125	PPT	2	0	0	2
17.	Viruses and Worms - Types of Viruses - Virus Detection Methods	T-141	PPT	2	0	0	2
UNIT – III							
18.	Gathering Data from Networks &Denial of Service and Session Hijacking-Gathering Data from Networks: Sniffers - Understanding Host-to-Host Communication	T – 153	PPT	2	0	0	2
19.	How a Sniffer Works - Sniffing Countermeasures - Bypassing the Limitations of Switches - How ARP Works - ARP Spoofing and Poisoning Countermeasures	T – 158	PPT	2	0	0	2
20.	Wireshark Filters - Understanding MAC Flooding and DNS Spoofing	T – 161	PPT	2	0	0	2
21.	Denial of Service and Session Hijacking - Denial of Service -How DDoS Attacks Work - How BOTs/BOTNETs Work - Smurf and SYN Flood Attacks - DoS/DDoS Countermeasures	T – 173	PPT	2	0	0	2
22.	Session Hijacking - Sequence Prediction - Dangers Posed by Session Hijacking - Preventing Session Hijacking	T – 183	PPT	2	0	0	2
UNIT - IV							
23.	Website Hacking, Attacking Applications and Wireless Network Hacking -Web Hacking: Google, Web Servers, Web Application Vulnerabilities-How Web Servers Work - Types of Web Server Vulnerabilities	T – 197	PPT	2	0	0	2
24.	Attacking Applications: SQL Injection and Buffer Overflows -SQL Injection - Finding a SQL Injection Vulnerability - The Purpose of SQL Injection - SQL Injection Countermeasures	T –221	PPT	2	0	0	2

25.	Buffer Overflows -Types of Buffer Overflows and Methods of Detection - Buffer Overflow Countermeasures	T – 229	PPT	2	0	0	2
26.	Wireless Network Hacking - Wi-Fi and Ethernet - Authentication and Cracking Techniques	T – 239	PPT	2	0	0	2
27.	MAC Filters and MAC Spoofing - Rogue Access Points - Evil Twin or AP Masquerading - Wireless Hacking Techniques - Securing Wireless Networks	T – 248	PPT	2	0	0	2
UNIT - V							
28.	Physical Site Security, Bypassing Network Security & Ethics of Ethical Hacking-Physical Site Security -Components of Physical Security - Understanding Physical Security -	T – 261	PPT	2	0	0	2
29.	Physical Site Security Countermeasures - What to Do After a Security Breach Occurs.	T – 264	PPT	2	0	0	2
30.	Bypassing Network Security:- Evading IDSs, Honeypots, and Firewalls -Types of IDSs and Evasion Techniques -Firewall Types and Honeypot Evasion Techniques	T – 301	PPT	2	0	0	2
31.	Ethics of Ethical Hacking-How to Be Ethical- Security Audit Steps- Performing a Penetration Test	T – 16	PPT	2	0	0	2
32.	Keeping It Legal- Cyber Security Enhancement Act - SPY ACT 19 18 USC \$1029 and 1030 - U.S. State Laws- Federal Managers Financial Integrity Act	T – 18	PPT	2	0	0	2
TOTAL							60

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

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Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Text Book

T	Kimberly Graves ,Sybex(2010),CEH - Certified Ethical Hacker STUDY GUIDE,Wiley Publishing Incorp
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Reference Books

R1	Sean-Philip Oriyano ,Sybex(2016) ,CEH V9 - Certified Ethical Hacker STUDY GUIDE (version 9),Wiley Publishing Incorp
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R2	Patrick Engebretson (2011), The Basics of Hacking and Penetration Testing (Second Edition), Syngress/Elsevier.
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Web Resources

W1	https://www.eccouncil.org/programs/certified-ethical-hacker-ceh/
W2	https://iclass.eccouncil.org/our-courses/certified-ethical-hacker-ceh/

E – Books /Library INFLIBNET RESOURCES

E1	https://nlist.inflibnet.ac.in/search/Record/EBC5301594
E2	https://nlist.inflibnet.ac.in/search/Record/EBC5086913
E3	https://nlist.inflibnet.ac.in/search/Record/EBC1931614

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	III	online	PPT	Man in Middle attack, Replay attack	01

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	Unit - I, II, III (Sniffing)	50%
2.	II INTERNAL	Unit – III (from DoS attack) , IV, V	50%
3.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date

Course Coordinator / In-charge	Mrs.V.Gayathri		
Programme Coordinator	Mrs.S.Nirmala Devi		

Approved by			
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

6SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (EVEN SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Database Security Lab

Course Code : 19CS405

Year / Semester : II/ IV

Section: NIL Total No. of Students : 42

No of Credits : 3

Total No. of Contact Hours : 6

Course Teacher (s) Name : Mrs.J.Varalakshmi

Corresponding lab Paper : YES

Sl. No.	TOPIC	Reference / Text Book Page No.	*Teaching Aids	Mode of Delivery No of Hours	Cumulative Hours
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				L	T	P	
List of Experiments							
1.	Introduction	Web	Lab			3	3
2.	Insert, Update, Delete rows and Delete tables	web	Lab			3	6
3.	Retrieving Data using queries	web	Lab			3	9
4.	String, math and Date functions	web	Lab			3	12
5.	Constraints	web	Lab			3	15
6.	DISTINCT keyword	web	Lab			3	18
7.	Aggregate functions	web	Lab			3	21
8.	Grouping Result sets	web	Lab			3	24
9.	Joins	web	Lab			3	27
10.	Sub Queries	web	Lab			3	30
11.	Union operator	web	Lab			3	33
12.	Implementing views	web	Lab			3	36
13.	Control flow statements	web	Lab			3	39
14.	Triggers	web	Lab			3	42
15.	Transactions	web	Lab			3	45
16.	Stored Procedures	web	Lab			3	48
17.	Database Backup using commands for backup to disk with description,	web	Lab			3	51
18.	Differential backup, backup with multiple disk files, backup with password, Mirrored backup	web	Lab			3	54

19.	Encrypt and decrypt the Password	web	Lab			3	57
20.	Establish user permission through roles	web	Lab			3	60
TOTAL							60

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Web Resources

	https://www.w3schools.com/sql/
	https://www.tutorialspoint.com/sql/index.htm
	https://www.javatpoint.com/sql-tutorial
	https://www.geeksforgeeks.org/sql-tutorial/

E – Books /Library INFLIBNET RESOURCES

E1	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=
E2	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=5050193&query=
E3	https://ebookcentral.proquest.com/lib/inflibnet-ebooks/reader.action?docID=

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	DDL,DML,DCL COMMANDS	Assignment	2	HT

* *Proposed Actions can be Assignments , Seminars, Peer Teaching, Industrial Visit , Others (if any)*

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1.	-	Seminar	PPT	Front End and back end connectivity in VB .Net using SQL server	2

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	10 experiments	50%
2.	II INTERNAL	10 experiments	50%
3.	End Semester Examination	20 experiments	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.J.Varalakshmi		
Programme Coordinator	Mrs.S.Nirmala Devi		

Approved by			
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (EVEN SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Penetration TestingLab Course Code : 19CS406

Year / Semester : II / IV Section: NIL Total No. of Students : 42

No of Credits : 3 Total No. of Contact Hours : 4

Course Teacher (s) Name : Mrs.V.Gayathri Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book	*Teaching Aids	Mode of Delivery No of Hours	Cumulative Hours

				L	T	P	
UNIT - I							
1.	Introduction to Kali Linux	NA	PPT, VM ware, kali linux iso	1	0	5	6
2.	Foot Printing and Reconnaissance	NA	PPT, FP tools	1	0	5	6
3.	Scanning using NMAP – Live Host, Open Ports	NA	PPT, NMAP, IP scanner	1	0	5	6
4.	Scanning – Vulnerability, Network Diagram	NA	PPT, NMAP, Metasploit	1	0	5	6
5.	Understanding Ping, ARP, and nslookup Commands	NA	PPT, command prompt	1	0	5	6
6.	SNMP Enumeration	NA	PPT, kali linux metasploit	1	0	5	6
7.	Sniffing using Wireshark	NA	PPT, Wire shark	1	0	5	6
8.	DOS/ DDOS Attack	NA	PPT, LOIC tool	1	0	5	6
9.	ARP Poisoning using Ettercap	NA	PPT, Ettercap	1	0	5	6
10.	TCP DUMP – Network Traffic Analyzer Working	NA	PPT, TCP DUMP	1	0	5	6
TOTAL							60

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Web Resources

W1	https://www.eccouncil.org/programs/certified-ethical-hacker-ceh/
W2	https://iclass.eccouncil.org/our-courses/certified-ethical-hacker-ceh/

E – Books /Library INFLIBNET RESOURCES

E1	https://nlist.inflibnet.ac.in/search/Record/EBC5301594
E2	https://nlist.inflibnet.ac.in/search/Record/EBC5086913
E3	https://nlist.inflibnet.ac.in/search/Record/EBC1931614

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	Expri 4	online	Practical	Vulnerability Scanning using Metasploit	01

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	Experiment 1-4	50%
2.	II INTERNAL	Experiment 5-10	50%
3.	End Semester Examination	All the experiments	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mrs.V.Gayathri		
Programme Coordinator	Mrs.S.Nirmala Devi		

	Approved by		
	Name	Signature	Date
HoD	Mrs.N.Anuradha		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020– 2021 (EVEN SEMESTER)

Name of the Programme: B.Sc Computer Science (Security System Specialization)

Programme Code : CS1002

Title of the Course : Reasoning Skills

Year / Semester : II / IV

Section: A&B

Course Code : 19WR409

Total No. of Students : 42

No of Credits : 2

Total No. of Contact Hours : 3

Course Teacher (s) Name: S. Suriaprakash/R.Sivasubramanian

Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT - I							
1.	Series	T-1	BB/ WB/ OER	2	0	0	2
2.	Classification	T-206	BB/ WB/ OER	2	0	0	4
3.	Logical Venn diagram	T-346	BB/ WB/ OER	2	0	0	6
UNIT – II							
4.	Coding and Decoding	T-169	BB/ WB/ OER	2	1	0	3
5.	Blood relationship	T-220	BB/ WB/ OER	2	1	0	6
UNIT – III							

6.	Direction Sense Test,	T-324	BB/ WB/ OER	2	1	0	3
7.	Schedule Day/Date/Time	T-459	BB/ WB/ OER	2	1	0	6
UNIT – IV							
8.	Ranking	T-417	BB/ WB/ OER	2	0	0	2
9.	Symbols and Notations	T-420	BB/ WB/ OER	2	0	0	4
10.	Inequality	T-429	BB/ WB/ OER	2	2	0	6
UNIT – V							
11.	Analogy (nonverbal)	T-136	BB/ WB/ OER	1	0	0	1
12.	Odd Man Out	T-303	BB/ WB/ OER	1	1	0	3
13.	Mirror Images,	T-267	BB/ WB/ OER	1	0	0	4
14.	Grouping Images	T-270	BB/ WB/ OER	1	1	0	6
TOTAL							30

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open

Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included.

[Mark the abbreviation in the teaching aids column]

Text Book

T	1) Agarwal R.S, 'A modern approach to Logical reasoning' Chand Publishers.
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Reference Books

R1	1. B S SIJWALI, INDU SIJWAL, "A new approach to Reasoning Verbal & Nonverbal (English)"
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Web Resources

W1	https://www.indiabix.com/
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E – Books /Library INFLIBNET RESOURCES

E1	https://www.careerride.com/mcq-topics/logical-reasoning-mcq-questions-placement-tests-187.aspx
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COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	Unit - I, II, III (50%)	50%
2.	II INTERNAL	Unit – III (50%) , IV, V	50%
3.	End Semester Examination	Unit I to V	100%

Prepared by			
Designation	Name	Signature	Date
Course Coordinator / In-charge	Mr. S. Suria Prakash Mr. R. Sivasubramanian		
Programme Coordinator			

Approved by			
	Name	Signature	Date
HoD	Mr. Sivasubramanian		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 21 (EVEN SEMESTER)

53. Name of the Programme :	54. ANI/VIS/CS/NET/MCHM/FSPM/F&IS/HONS&ACCA/ B.Com B&I/BBA	55. Programme Code :	56.
57. Course Name :	58. Basic Tamil IV	59. Course Code :	60. 19UBT410
61. Year / Semester	62. II / II	63. Section	64.
65. Total No. of Students	66. 24	67. No. of Credits	68. 2
69. Corresponding lab Paper	70. No	71. Total No. of Contact Hours	72. 30
73. Course Teacher Name	74. Ms.R.Sailakshmi		

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I							
1	பழங்கள்	CM/1	BB	1			1
2	காய்கறிகள்	CM/2	BB	1			1
3	மளிகைப்பொருட்கள்	CM/3	BB	1			1
	அறுசுவை	CM/4	BB	1			1

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
	சந்தையில் பயன்படுத்தும் சொற்கள்	CM/5	BB	1			1
	உரையாடல்	CM/6	BB	1			1
UNIT – II							
	மருத்துவத்துறை தொடர்பானவை	CM/7	BB	1			1
	கல்வித்துறை தொடர்பானவை	CM/8	BB	1			1
	விளையாட்டு தொடர்பானவை	CM/9	BB	1			1
	புவியியல்துறை தொடர்பானவை	CM/10	BB	1			1
	வானியல்துறை, வீடு தொடர்பானவை	CM/11	BB	1			1
	பொதுச் சொற்கள்	CM/12	BB	1			1
UNIT – III							
	எழுத்து வேறுபாடுகள்	CM/13	BB	2			2
	பிரித்து எழுதுதல்	CM/14	BB	2			2
	சேர்த்து எழுதுதல்	CM/15	BB	2			2
UNIT – IV							
	சொல்லும் பொருளும்	CM/16	BB	1			2
	எதிர்ச்சொல்	CM/17	BB	1			2
	மரபும் வழுவும்	CM/18	BB	1			1
	மொழிபெயர்ப்பு - தமிழ்-ஆங்கிலம்	CM/19	BB	1			1
	மொழிபெயர்ப்பு - ஆங்கிலம் - தமிழ்	CM/20	BB	2			2

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
UNIT – V							
	தமிழ் நூல்களும் ஆசிரியர்களும்	CM/21	BB	1			1
	பொன்மொழிகள்	CM/22	BB	1			1
	சிறப்புத் தொடர்கள்	CM/23	BB	2			2
	உரையாடல்	-	BB	2			2
TOTAL HOURS							30

L – Lecture T – Tutorial (Problems / Example Programs / Revision Classes) P – Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included. [Mark the abbreviation in the teaching aids column]

Course Material

75. அடிப்படைத் தமிழ்; - II – பாடநூல் தொகுப்பு வெளியீடு தமிழ்த்துறை கல்லூரித் -

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	உரையாடல்		2	(HB)
2.	புத்தகம் வாசித்தல்		2	(HB)

* Proposed Actions can be Assignments, Seminars, Peer Teaching, Industrial Visit, Others (if any)

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	1	Assignment	1	மொழிபெயர்ப்பு	1
2		Seminar	1	புத்தகம் விமர்சனம் செய்தல்	1
3	2	Peer teaching	1	நடைமுறை நிகழ்வுகளை கலந்தாலோசித்தல்	1

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	Unit – I, II, III (up to -----)	50%
2.	II INTERNAL	Unit – III (from -----) , IV, V	50%
3.	End Semester Examination	Unit I to V	100%
Designation		Prepared by	
		Name	Signature
Course Coordinator / In-charge		Ms . R. Sailakshmi	
		Date	

Approved by			
	Name	Signature	Date
HoD	Mrs . N. SELVI		
Dean Academics	Dr.S.PRIYA		

Principal	Dr.R.SUJATHA		
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SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN - 2020 - 21 (ODD/EVEN SEMESTER)

76. Name of the Programme :	77. CS/F&IS	78. Programme Code :	79.
80. Course Name :	81. Advanced Tamil IV	82. Course Code :	83. 19UAT411

84. Year / Semester	85. II / II	86. Section	87.
88. Total No. of Students	89. 23	90. No. of Credits	91. 2
92. Corresponding lab Paper	93. No	94. Total No. of Contact Hours	95. 30
96. Course Teacher Name	97. H.GEETHA		

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I							
1	நாயன்மார் பாடல்கள்	CM/1	BB	2			2
2	ஆழ்வார் பாடல்கள்	CM/2	BB	2			2
3	சிலப்பதிகாரம்	CM/3	BB	2			2
UNIT – II							
	தமிழ் மொழியின் வரலாறு	CM/5	BB	2			3
	செம்மொழிகளும் தமிழும்	CM/7	BB	2			3
UNIT – III							
	திருக்குறள் (ஒழுக்கமுடைமை 1-10)	CM/9	BB	2			2
	திருக்குறள் (விருந்தோம்பல் 1-10)	CM/10					2
	நாலடியார் (செல்வம் நிலையாமை 1-5)	CM/11					2
UNIT – IV							
	தமிழ்ச் சொற்களும் பிறமொழிச் சொற்களும்	CM/12	BB	3			2

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
	சொல் வகைகள்	CM/14	BB	3			2
	வினா, விடை – வகைகள்	CM/16	BB	3			2
UNIT – V							
	கட்டுரைப் பயிற்சி	--	BB	3			6
TOTAL HOURS							30

L – Lecture T – Tutorial (Problems / Example Programs / Revision Classes) P – Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included. [Mark the abbreviation in the teaching aids column]

Course Material

98. பொதுத்தமிழ்-IV– பாடநூல் தொகுப்பு கல்லூரித் -தமிழ்த்துறை வெளியீடு

Reference Books

99. தேவாரம்.சைவசித்தாந்த நூற்பதிப்புக்கழக வெளியீடு.கும்பகோணம்: 1990. Print
100. நாலாயிரதிவ்வியப்பிரபந்தம்.சைவசித்தாந்த நூற்பதிப்புக்கழக வெளியீடு. 1992. Print.
101. ஞா.மாணிக்கவாசகன். சிலப்பதிகாரம்,உமா பதிப்பகம், சென்னை: 1976.Print.
102. மு.வரதராசனார் உரை . திருக்குறள், சைவ சித்தாந்த நூற்பதிப்புக் கழகம்,1996. Print.
103. அ.மாணிக்கம். நாலடியார், மணிவாசகர் பதிப்பகம்,மதுரை :1982. Print.
104. பயன்பாட்டுத்தமிழ் இலக்கணம். மணிவாசகர் பதிப்பகம்> மதுரை: 1995.Print.

Gaps in the Syllabus

SL. NO	Name of the Topic	PROPOSED ACTION	No of Hours Allotted	Hours with in the Time Table (HT) / Hours beyond the Time Table (HB)
1.	செய்தித்தாள்கள் வாசித்தல்		2	(HB)
2.	புத்தகம் வாசித்தல்		2	(HB)

* Proposed Actions can be Assignments, Seminars, Peer Teaching, Industrial Visit, Others (if any)

COURSE PLAN FOR CONTENT BEYOND SYLLABUS (TO MEET THE INDUSTRIAL NEEDS)

Sl.NO	Module	Mode of Delivery	Teaching Aids	Planned Topics	Total No of Hours Allotted
1	1	Assignment	2	கட்டுரை எழுதுதல்	2
2		Seminar	2	புத்தகம் வாசித்து விமர்சனம் செய்தல்	2
3	2	Peer teaching	2	நடைமுறை நிகழ்வுகளை கலந்தாலோசித்தல்	2

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	Unit – I, II, III (up to -----)	50%
2.	II INTERNAL	Unit – III (from -----) , IV, V	50%
3.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	N . SELVI		

Approved by			
	Name	Signature	Date
HoD	Mrs . N . SELVI		
Dean Academics	Dr.S.PRIYA		
Principal	Dr.R.SUJATHA		

COURSE PLAN – 2020 – 21 (EVEN SEMESTER)

Name of the Programme :	Bsc CS	Programme Code :	AN1003
Course Name :	Basic 2D Animation	Course Code :	19AN408
Year / Semester	II/IV	Section	A & B
Total No. of Students	40	No. of Credits	4
Corresponding lab Paper	Yes	Total No. of Contact Hours	35
Course Teacher Name	Mr.S.Praveen Kumar		

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I Introduction to 2D Animation							
1.1	Introduction to 2D Animation	22	Adobe Animate CC			P	2
1.2	Drawing concepts	314				P	4
1.3	Characters drawn in basic shapes	61				P	6
1.4	Manipulating basic shapes	168				P	8
1.5	Storyboarding	171				P	10
UNIT – II Layout & Designing							
2.1	Basic of sketching, still life and assignment of basic drawing, Composition of basic elements	62	Adobe Animate			P	12

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery			Cumulative Hours
				No	of	Hours	
2.2	Explore the relationship between elements	277	CC			P	14
2.3	Pixel and resolution: Vector and Bitmap Graphics	294				P	16
2.4	Animation movie Pipeline	298				P	18
UNIT – III Cartoon Animation							
3.1	Intro to Animation	-	Adobe Animate CC			P	20
3.2	Types of animation and Principles	-				P	22
3.3	Introduction to Cartoon animation	211				P	23
3.4	User Interface	194				P	24
3.5	Tools and uses	232				P	25
UNIT – IV Production/Post production							
4.1	Understanding Background composition	468	Adobe Animate CC			1	26
4.2	Basic Understanding of 2D animation and technique	-				P	27
4.3	Bouncing Ball Animation	469				P	28
4.4	Butterfly Animation	360				P	29
4.5	Text Animation	-				P	30
UNIT – V Project							
5.1	Develop a 2d Animation Advertisement.	-	Adobe Animate			P	35

Sl. No.	TOPIC	Reference / Text Book Page No	*Teaching Aids	Mode of Delivery			Cumulative Hours
			CC				
TOTAL HOURS							35

L – Lecture T – Tutorial (Problems / Example Programs / Revision Classes) P – Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) any other tools may also be included. [Mark the abbreviation in the teaching aids column]

Text Book

1)

(Author) 2005 Focal Press.

Animation: The Mechanics of Motion - Chris Webster

Reference Books

- 1) **Hollywood 2D Digital Animation: The New Flash Production Revolution - Sandro Corsaro, Clifford J. Parrott (Author) 2004 by New Riders Publishing.**

Web Resources

29. <https://www.youtube.com/watch?v=rzq1aVTQksk>
30. <https://www.youtube.com/watch?v=QadutYPoqMs>
31. <https://www.youtube.com/watch?v=LgWYkb1fPTw>
32. <https://www.youtube.com/watch?v=YtSUA6LrdtI>

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	SLIP / CLASS TEST	Unit – I	20%
2.	I INTERNAL	Unit – I, II, III	50%
3.	II INTERNAL	Unit – III, IV, V	50%
4.	End Semester Examination	Unit I to V	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mr.S.Praveen Kumar		
Programme Coordinator	Mrs.S.Nirmala Devi		

Approved by			
	Name	Signature	Date
HoD	Mr.P.Kishore Kumar		
Dean Academics	Dr.S.Priya		
Principal	Dr.R.Sujatha		

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

COURSE PLAN – 2020 – 2021 (ODD SEMESTER)

Name of the Programme : B.Sc Computer Science (Security System Specialization)
Programme Code :
Title of the Course : NME -Office Automation Lab-II Course Code : 20CS407
Year / Semester : II / IV Section: NIL Total No. of Students : 26
No of Credits : 2 Total No. of Contact Hours : 2
Course Teacher (s) Name : Mr. J. RAJKUMAR Corresponding lab Paper : Yes / No

Sl. No.	TOPIC	Reference / Text Book_Page No	*Teaching Aids	Mode of Delivery No of Hours			Cumulative Hours
				L	T	P	
UNIT – I							
1.	Getting Started, Exploring Windows and Backstage View	NA	PPT, T	0	0	2	2
2.	Create the presentation to illustrate Preset Animation Schemes	NA	PPT, T	0	0	2	2
3.	Create the presentation to illustrate Custom Animation	NA	PPT, T	0	0	4	4
4.	Create the presentation to illustrate Custom Effects for Text & Pictures	NA	PPT, T	0	0	2	2
5.	Create the Presentation to include Audio, Video & Hyper links in the slides	NA	PPT, T	0	0	4	4
6.	To create the presentation for the department using Power Point	NA	PPT, T	0	0	2	2

7.	To create the presentation for the college using PowerPoint	NA	PPT, T	0	0	2	2
8.	Create a new database and table to store student personal details	NA	PPT, T	0	0	2	2
9.	Create a table to store student mark details	NA	PPT, T	0	0	2	2
10.	Create relationship among above 2 tables	NA	PPT, T	0	0	4	4
11.	Create Queries to extract details from above 2 tables	NA	PPT, T	0	0	2	2
12.	Create and Connect to Database (Database Connectivity)	NA	PPT, T	0	0	2	2
TOTAL							30

* L - Lecture T - Tutorial (Problems / Example Programs / Revision Classes) P - Practical

* LCD / PPT / Black Board (BB) / Worksheet(WS) / Video (V) / Group Discussion (GD) / Blended & Flipped (BF) / Open Educational Resources (OER) media that are freely accessible, Google tools like Drive (GRV) , Google Docs (GDO), and Google Slides(GS) , Google Forms (GOF) and Whiteboards(WB),Wikipedia (W) , Notepad (NP) , Browser (B), Linux Server(LS), Telnet(T) any other tools may also be included [Mark the abbreviation in the teaching aids column].

Text Book

T1	NA
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Reference Books

R1	NA
R2	NA

Web Resources

W1	https://www.w3schools.com
W2	https://www.tutorialspoint.com

PORTION FOR EXAMINATION

Sl. No.	Mode	Proposed Portions to be Covered	Proportion (Portion) in Percentage
1.	I INTERNAL	1 - 6 Exercises	50%
2.	II INTERNAL	7 - 10 Exercises	50%
3.	End Semester Examination	12 Exercises	100%

Designation	Prepared by		
	Name	Signature	Date
Course Coordinator / In-charge	Mr. J. Rajkumar		
Programme Coordinator			

Approved by			
	Name	Signature	Date
HoD	Mr. M. Athigopalan		
Dean Academics	Dr. S. Priya		
Principal	Dr. R. Sujatha		