SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED [M.S.]

Choice Based Credit System

(CBCS Pattern)

Faculty of Computer Studies

Syllabus of B.Sc. Computer Science F. Y.

Effective from Academic Year (2016-2017)

Under Graduate (UG) Program

Semester	Subject Code	Course Name	Credit		Total Credits
			Internal	External	
Semester – I	S1.1	1. Basics of Computer System	1	3	4
	S1.2	2. Communication and Soft Skills – I	1	3	4
	S1.3	3. Fundamental of Digital Logic	1	3	4
	S1.4	4. Statistical Techniques in Computer Science	1	3	4
	S1.Lab 1	5. Lab Course – 1 (DOS, Windows & Linux OS)	-	2	2
	S1.Lab 2	6. Lab Course – 2 (Office Automation)	-	2	2
		TOTAL			**20**
Semester – II	S2.1	1. Database Management System	1	3	4
	S2.2	2. Programming in C	1	3	4
	S2.3	3. Web Technology	1	3	4
	S2.4	4. Communication and Soft Skills – II	1	3	4
	S2.Lab 1	5. Lab Course – 3 (Programming in C)	-	2	2
	S2.Lab 2	6. Lab Course – 4 (Web Technology)	-	2	2
		TOTAL			**20**

Name of Course	B.Sc. (Computer Science) First Year & B.Sc. (Soft. Engg.) First Year
Semester	I Semester
Name of Subject	Basics of Computer System
Subject Code	S1.1

Unit – I

1.		**Basic Computer Organization and History**	**Lecturers Required**	**Ref. No.**
	a)	Characteristics of Computer	02	1, 2
	b)	Basic Computer Organization	01	1, 2
	c)	Generation of Computer	02	1, 2
	d)	Classification of Computer Minicomputer, Microcomputer, Mainframe System, Workstations, Client and Server, Handheld Computer, Supercomputer	04	1, 2

References:

Sr. No.	Name of the Book	Author	Publication
1.	Fundamental of Computer – 5th & 6th Edition	P.K.Sinha	BPB Publication
2.	Fundamental of Computer	V. Rajaraman	PHI Publication

Unit – II

2.		**Computer Peripherals**	**Lecturers Required**	**Ref. No.**
	a)	Input Devices :- Keyboard, Mouse, trackball, Joystick, electronic pen, Touch Screen, Image Scanner, OCR, OMR, MICR, Bar code reader, Digitizer, speech recognition devices.	04	1, 2
	b)	Output Devices :- Monitors, Dot-matrix printer, Ink-jet printer, Laser Printer, Plotter.	03	1, 2
	c)	Modem and Projector	01	1, 2
	d)	Bio-metric devices	01	1

References:

Sr. No.	Name of the Book	Author	Publication
1.	Fundamental of Computer – 5th & 6th Edition	P.K.Sinha	BPB Publication
2.	Fundamental of Computer	V. Rajaraman	PHI Publication

Unit – III

3.		Computer Memory	Lecturers Required	Ref. No.
	a)	Main Memory :- RAM, ROM, PROM, EPROM, UVEPROM, EEPROM, Base Memory, Cache Memory.	04	1, 2
	b)	Secquential Access Memory :- Magnetic Tape.	01	1, 2
	c)	Direct Access Memory :- HDD.	01	1, 2
	d)	Optical Storage :- CD, DVD, Blue-ray disk.	02	1, 2
	e)	Flash Memory :- Pen-drive, memory card.	01	1, 2

References:

Sr. No.	Name of the Book	Author	Publication
1.	Fundamental of Computer – 5th & 6th Edition	P.K.Sinha	BPB Publication
2.	Fundamental of Computer	V. Rajaraman	PHI Publication

Unit – IV

4.		Operating System	Lecturers Required	Ref. No.
	a)	Introduction to Operating System	01	1, 2
	b)	Functions of Operating System	01	1, 2
	c)	Types of Operating System	02	1, 2, 3
	d)	DOS and Windows OS	02	1, 2
	e)	Linux OS	01	1, 2, 3

References:

Sr. No.	Name of the Book	Author	Publication
1.	Fundamental of Computer – 5th & 6th Edition	P.K.Sinha	BPB Publication
2.	Fundamental of Computer	V. Rajaraman	PHI Publication
3.	The complete reference in Linux	Richard Petersen	McGraw Hill Publishing Co. Ltd.

Unit – V

5.		Application and Software Packages	Lecturers Required	Ref. No.
	a)	Word Processing	02	1, 2
	b)	Spread Sheet Software	02	1, 2
	c)	Graphics Packages- Coral draw	02	1, 2
	d)	Personal Assistant Packages-Intelligent Personal Assistant (IPA)	01	1, 2

References:

Sr. No.	Name of the Book	Author	Publication
1.	Fundamental of Computer – 5th& 6th Edition	P.K.Sinha	BPB Publication
2.	Fundamental of Computer	V. Rajaraman	PHI Publication

Unit – VI

6.		Data Communication and Internet	Lecturers Required	Ref. No.
	a)	Data transmission modes	02	1, 2
	b)	OSI Model	01	1, 2
	c)	Role of communication protocol	02	1, 2
	d)	Wireless network technologies	02	1, 2
	e)	E-mail, FTP,	01	1, 2
	f)	Web Browser and types of web browser	02	1, 2

References:

Sr. No.	Name of the Book	Author	Publication
1.	Fundamental of Computer – 5th& 6th Edition	P.K.Sinha	BPB Publication
2.	Fundamental of Computer	V. Rajaraman	PHI Publication

Name of Course	B.Sc. (Computer Science) First Year & B.Sc. (Soft. Engg.) First Year
Semester	I Semester
Name of Subject	Communication and Soft Skills - I
Subject Code	S1.2

Unit – I

1.		**English Grammar & Usages**	**Lecturers Required**	**Ref. No.**
	a)	Basic sentence structures	03	1, 2, 3, 4
	b)	Verbs and their forms with Tenses	03	1, 2, 3, 4
	c)	Clauses	03	1, 2, 3, 4
	d)	Synonyms & Antonyms	01	1, 2, 3, 4
	e)	Idioms & Phrases	02	1, 2, 3, 4

References:

Sr. No.	Name of the Book	Author	Publication
1)	A Practical English Grammar	A. J. Thomson, A.V. Martinet	Oxford University Press – 4th Edition
2)	English grammar and composition	Rajendra Pal &PremLata Suri	Sultan Chand & Sons Publication – 19th Edition
3)	English grammar and composition	Wren & Martin	S. Chand & Co. Ltd. -2008/9th Edition
4)	Mac Millan Foundation English	R. K. Dwivedi, A. Kumar.	MacMillan India Ltd. – 2002 /2nd Edition

Unit – II

2.		**Communication Skills**	**Lecturers Required**	**Ref. No.**
	a)	Concept	01	01
	b)	Methods (verbal & non-verbal)	02	01
	c)	Barriers to communication	03	01
	d)	Principles of effective communication	02	01

References:

Sr. No.	Name of the Book	Author	Publication
1)	Developing communication Skills	Krishna Mohan, Meera Banerji	MacMillan India Ltd. – 2005 /16th Edition

Unit – III

3.		**Soft Skills & Situational English**	**Lecturers Required**	**Ref. No.**
	a)	Soft Skills : Concept & Skills	02	1, 2, 3
	b)	Leadership	03	1, 2, 3
	c)	Situational English : Thanking, inviting, Greetings, Introduction, Enquiring, Expressing gratitude, etc.	04	1, 2, 3

References:

Sr. No.	Name of the Book	Author	Publication
1)	Soft Skills	K Alex.	-
2)	Spoken English- Level one	G Radhakrishana Pillai, K Rajeevan	OlivannanGopalakrishanan Emerald Publication – 2008 Edition
3)	Personality Development & Communicative English	Dr. T. Bharti & Dr. M Hariprasad	Neelkamal Publications Pvt. Ltd. 2007 – 7th Edition

Unit – IV

4.		Carrier skills	Lecturers Required	Ref. No.
	a)	Group Discussion	02	1, 2, 3, 4
	b)	Personal Interview	02	1, 2, 3, 4
	c)	Conflict Management	02	1, 2, 3, 4

References:

Sr. No.	Name of the Book	Author	Publication
1)	Developing communication Skills	Krishna Mohan, Meera Banerji	Macmillan India Ltd. 16th Edition
2)	Group Discussion for Admissions & Jobs	AnandGanguly	Pustak Mahal, Delhi
3)	Soft Skills	K Alex.	-
4)	Personality Development & Communicative English	Dr. T. Bharti & Dr. M Hariprasad	Neelkamal Publications Pvt. Ltd. Hydrabad 2007 – 7th Edition

Unit – V

5.		Passage comprehension & Reading strategies	Lecturers Required	Ref. No.
	a)	Reading skills	01	1, 2
	b)	Reading & understanding different text	03	1, 2

References:

Sr. No.	Name of the book	Author	Publication
1)	English grammar and composition	Rajendra Pal &PremLata Suri	Sultan Chand & Sons Publication – 19th Edition
2)	Personality Development & Communicative English	Dr. T. Bharti & Dr. M Hariprasad	Neelkamal Publications Pvt. Ltd., Hydrabad 2007 – 7th Edition

Unit – VI

6.		Writing Skills	Lecturers Required	Ref. No.
	a)	E-mail writing : To seek jobs, invitation, inviting, thanking emails, etc.	03	1, 2
	b)	Formal letters : Job application, Placing supply order, letter to editors, etc.	03	1, 2
	c)	Resume Building	01	1, 2

References:

Sr. No.	Name of the Book	Author	Publication
1)	Soft Skills	K Alex.	-
2)	Mac Millan Foundation English	R. K. Dwivedi, A. Kumar.	Macmillan India Ltd. 2002 – 2nd Edition

Name of Course	B.Sc. (Computer Science) First Year & B.Sc. (Soft. Engg.) First Year
Semester	I Semester
Name of Subject	Fundamental of Digital Logic
Subject Code	S1.3

Unit – I

1.		Fundamental concepts	Lecturers Required	Ref. No.
	a)	Introduction	01	1
	b)	Digital Signals	01	1
	c)	Basic Gates and derived Gates: AND, OR, NOT, NAND, NOR, ExOR, Ex-NOR	03	1
	d)	De-Morgan's theorems	01	1

References :

1)	"Modern Digital Electronics": -by R.P. Jain Tata McGraw –Hill Publication 3rd Edition ISBN:978-0-07-049492-3

Unit – II

2.		Number System and codes	Lecturers Required	Ref. No.
	a)	Introduction to number systems	01	1
	b)	Decimal, Binary, Octal, Hexadecimal	03	1
	c)	Conversation from one number system to another number system.	03	1
	d)	Binary Arithmetic: Addition , Subtraction, Multiplication, Division	03	1
	e)	Half adder, full adder	01	1
	f)	1's and 2's compliment of Binary Number	03	1
	g)	Codes : BCD Code, Excess-3 Code, Gray Code	03	1
	h)	Error detecting and correcting codes	03	1

References :

1)	"Modern Digital Electronics": -by R.P. Jain Tata McGraw –Hill Publication 3rd Edition ISBN:978-0-07-049492-3

Unit – III

3.		Combinational Logic Design	Lecturers Required	Ref. No.
	a)	Standard Representation of logical functions SOP, POS Forms	03	1
	b)	K-map Representation of logical functions	02	1
	c)	Simplification of logical functions using K-map	04	1
	d)	Multiplexer, Demultiplexer	03	1
	e)	Encoder, Decoder	02	1

References :

1)	"Modern Digital Electronics": -by R.P. Jain Tata McGraw –Hill Publication 3rd Edition ISBN:978-0-07-049492-3

Unit – IV

4.		Flip Flops	Lecturers Required	Ref. No.
	a)	1-Bit Memory Cell	01	1
	b)	Clocked S-R Flip Flop	01	1
	c)	J-K Flip Flop	01	1
	d)	Master Slave Flip Flop	01	1
	e)	D-type Flip Flop	01	1
	f)	T-type Flip Flop	01	1

References :

1)	"Modern Digital Electronics": -by R.P. Jain Tata McGraw –Hill Publication 3rd Edition ISBN:978-0-07-049492-3

Unit – V

5.		Sequential Logic Design	Lecturers Required	Ref. No.
	a)	Registers	01	1
	b)	Shift Register	02	1
	c)	Counter Synchronous and asynchronous Counter	03	1

References :

1)	"Modern Digital Electronics": -by R.P. Jain Tata McGraw –Hill Publication 3rd Edition ISBN:978-0-07-049492-3

Unit – VI

6.		Timing Circuits, Converters & Introduction to microprocessor	Lecturers Required	Ref. No.
	a)	Digital To Analog Converter	01	1
	b)	Analog To Digital Converter	01	1
	c)	I/O Buses	01	1
	d)	Block diagram of Microprocessor	02	1

References :

1)	"Modern Digital Electronics": -by R.P. Jain Tata McGraw –Hill Publication 3rd Edition ISBN:978-0-07-049492-3
2)	MICROPROCESSOR -by B.RamDhanpat publication 5th Edition
3)	Fundamentals of Computer by P.K Singha BPB publication 6th Edition ISBN:81-7656-752-3

Name of Course	B.Sc. (Computer Science) First Year & B.Sc. (Soft. Engg.) First Year
Semester	I Semester
Name of Subject	Statistical Techniques in Computer Science
Subject Code	S1.4

Unit – I

1.		Introduction	Lecturers Required	Ref. No.
	e)	Definition of Statistics	01	1
	f)	Importance of Statistics	01	1
	g)	Limitation of Statistics	01	1
	h)	Scope of Statistics (Computer Science, Industry, Economics, Social Science)	02	1

References :

Sr. No.	Name of Book	Writer	Publication
1)	Fundamental of Statistics	S. C. Gupta	Himalaya Publication (6th revised & Enlarged Edition)

Unit – II

2.		Data Condensation and Graphical Methods	Lecturers Required	Ref. No.
	d)	Collection of Data, Types of Data	1	1, 2
	e)	Construction of Frequency, Cumulative and Relative Frequency distributions.	2	1, 2
	f)	Graphical representation of Frequency distribution: Histogram, Frequency Polygon, Frequency Curve and Cumulative Frequency curves	3	1, 2
	g)	Diagrammatic representations: Simple bar, Subdivided bar and Pie diagrams.	2	1, 2

References :

Sr. No.	Name of Book	Writer	Publication
1.	Fundamental of Statistics	S. C. Gupta	Himalaya Publication (6th revised & Enlarged Edition)
2.	Statistical Methods	S. P. Gupta	Sultan Chand & Sons Publication (37th Revised Edition)

Unit – III

3.		Measures of Central Tendency	Lecturers Required	Ref. No.
	f)	Concept of central tendency	01	1, 2
	g)	Arithmetic Mean: Definition, Formulae and computation for ungrouped and grouped data, Merits and Demerits. Weighted Arithmetic Mean	03	1, 2
	h)	Median: Definition, Formulae and Computation for ungrouped and grouped data, Merits and Demerits.	03	1, 2
	i)	Mode: Definition, Formulae and Computation for ungrouped and grouped data, Merits and Demerits.	03	1, 2

References :

Sr. No.	Name of Book	Writer	Publication
1)	Fundamental of Statistics	S. C. Gupta	Himalaya Publication(6th revised & Enlarged Edition)
2)	Statistical Methods	S. P. Gupta	Sultan Chand & Sons Publication (37th Revised Edition)

Unit – IV

4.		Measures of Dispersion:	Lecturers Required	Ref. No.
	f)	Concept of Dispersion.	01	1, 2
	g)	Range: Definition, Formulae and Computation for ungrouped and grouped data.	01	1, 2
	h)	Standard Deviation: Definition, Formulae and Computation for ungrouped and grouped data.	03	1, 2
	i)	Variance: Definition, Formulae and Computation for ungrouped and grouped data.	02	1, 2
	j)	Coefficient of variance: Definition, Formulae and Computation for ungrouped and grouped data.	02	1, 2

References :

Sr. No.	Name of Book	Writer	Publication
1)	Fundamental of Statistics	S. C. Gupta	Himalaya Publication (6th revised & Enlarged Edition)
2)	Statistical Methods	S. P. Gupta	Sultan Chand & Sons Publication (37th Revised Edition)

Unit – V

5.		Probability	Lecturers Required	Ref. No.
	e)	Permutation and combination	01	1
	f)	Sample space, Events and Types of events.	01	1
	g)	Classical definition of probability and axioms of probability.	01	1
	h)	Theorems on Probability: i) $0 \le P(A) \le 1$ ii) $P(A) + P(A') = 1$ iii) $P(A \cup B) = P(A) + P(B)$ iv) $P(A \cup B) = P(A) + P(B) - P(A \cap B)$	03	1
	i)	Problems on Probability	02	1

References :

Sr. No.	Name of Book	Writer	Publication
1)	Fundamental of Mathematical Statistics	S. C. Gupta & V. K. Kapoor	Sultan Chand & Sons Publication (9th Extensively Revised Edition)

Unit – VI

6.		Correlations and regressions	Lecturers Required	Ref. No.
	g)	Definition of Correlation & Types	01	1, 2
	h)	Karl Pearson's coefficient of correlations for ungrouped data and problems	03	1, 2
	i)	Definition of Regression.	01	1, 2

References :

Sr. No.	Name of Book	Writer	Publication
1)	Fundamental of Statistics	S. C. Gupta	Himalaya Publication (6th revised & Enlarged Edition)
2)	Statistical Methods	S. P. Gupta	Sultan Chand & Sons Publication (37th Revised Edition)

Lab Course – 1 (S1.Lab 1)

(DOS, Windows and Linux)

Sr. No.	Title of Programme	Required Hours
1)	Study of external commands in DOS	4 hours
2)	Study of Internal Commands in DOS	4 hours
3)	Study of Batch File in DOS	1 hours
4)	Study of Windows Explorer	4 hours
5)	Study of Notepad	2 hours
6)	Study of WordPad	2 hours
7)	Study of Paint	2 hours
8)	Study of Calculator	1 hours
9)	Study of Character Map	1 hours
10)	Study of My Network Places	2 hours
11)	Study of File Related Commands in LINUX	2 hours
12)	Study of Directory Related Commands in LINUX	2 hours
13)	Study of Communication Commands in Linux	2 hours
14)		2 hours

References:

Sr. No.	Name of the book	Author	Publication
1.	MS-DOS 6.22	Russell A. Stultz	BPB Publication
2.	Working in MS-Office	Ron Mansfield	Tata McGraw Hill Edition
3.	Windows 98 Complete	Microsoft	BPB Publication
4.	MS-DOS programming	Microsoft	BPB Publication

Lab Course – 2 (S1.Lab2)

(Office Automation)

Sr. No.	Title of Programme	Required Hours
15)	Study of Word	3 hours
16)	Study of EXCEL	3 hours
17)	Study of PowerPoint	3 hours
18)	Study of Access	3 hours
19)	Study of Find and Replace Dialog Box in Word	2 hours
20)	Study of Page Setup Dialog Box	2 hours
21)	Study of Table Formatting	2 hours
22)	Study of Custom Dictionary &Goto Dialog Box	2 hours
23)	Study of mail merge	1 hours
24)	Study of creating charts.	2 hours
25)	Study of border and shading dialog box.	1 hours
26)	Study of paragraph dialog box	2 hours

References:

Sr. No.	Name of the book	Author	Publication
1.	Working in MS-Office	Ron Mansfield	Tata McGraw Hill Edition
2.	Windows 98 Complete	Microsoft	BPB Publication

Name of Course	B.Sc. (Computer Science) First Year & B.Sc. (Soft. Engg.) First Year
Semester	II Semester
Name of Subject	Database Management System
Subject Code	S2.1

Unit – I

1.		Introduction to DBMS	Lecturers Required	Ref. No.
	a)	Intro, Definition & application area	3	1, 2, 3
	b)	Characteristics of DBMS	2	1, 2, 3
	c)	Data Models (Relational, network, Hierarchical)	2	1, 2, 3
	d)	Structure of DBMS	2	1, 2, 3
	e)	Data independence	1	1, 2, 3
	F)	Users of DBMS	1	1, 2, 3
	g)	Advantages & disadvantages of DBMS	1	1, 2, 3

References:

Sr. No.	Name of the book	Author	Publication
1	Database System	By Korth	Mcgraw Hill International Edition (5th Edition)
2	Database System	C.J Date	Pearson Educational Publication (7th Edition)
3	Database management System	Bipin Desai	Galgotia Publication

Unit - II

1.		ER & Conversion ER to Relational Data Model	Lecturers Required	Ref. No.
	a)	Intro, ER data Model (entity, entity set, attributes, relationship & relationship set)	3	1
	b)	Relations, Conversion of ER to relational model	2	1
	c)	Integration Constraints(keys)	1	1
	d)	Aggregation	2	1

References:

Sr. No.	Name of the Book	Author	Publication
1	Database System	By Korth	Mcgraw Hill International Edition (5th Edition)

Unit - III

3		**Relational Algebra**	**Lecturers Required**	**Ref. No.**
	a)	Relational Algebra (Selection, Projection, Set operations Joins, division	6	1

References :

Sr. No.	Name of the Book	Author	Publication
1	Database System	By Korth	Mcgraw Hill International Edition (5th Edition)

Unit - IV

4.		**Database Designing**	**Lecturers Required**	**Ref. No.**
	a)	Functional Dependencies	1	1
	b)	Non loss decomposition	1	1
	c)	Functional dependencies, 1NF, 2NF, 3NF, BCNF & 5NF	5	1

References :

Sr. No.	Name of the Book	Author	Publication
1.	Database System	By Korth	Mcgraw Hill International Edition (5th Edition)

Unit - V

5.		**File organization**	**Lecturers Required**	**Ref. No.**
	a)	Introduction	1	1, 2
	b)	Organization of records in file	2	1, 2
	c)	Types of file organization (Heap, Sorted, Indexed & Hashed	5	1, 2

References :

Sr. No.	Name of the Book	Author	Publication
1.	Database System	By Korth	Mcgraw Hill International

			Edition (5th Edition)
2.	Database management System	Bipin Desai	Galgotia Publication

Unit - VI

6.		Index file organization	Lecturers Required	Ref. No.
	a)	Introduction	1	1
	b)	Types of Indexes (Dense, Sparse, Clustered, Primary and secondary & B+ tree)	4	1

References :

Sr. No.	Name of the Book	Author	Publication
1.	Database System	By Korth	Mcgraw Hill International Edition (5th Edition)

Name of Course	B.Sc. (Computer Science) First Year & B.Sc. (Soft. Engg.) First Year
Semester	II Semester
Name of Subject	Programming in C
Subject Code	S2.2

Unit – I

1.		Introduction to Programming in C	Lecturers Required	Ref. No.
	i)	History	01	1, 2, 3
	j)	Compilers and Interpreters	01	1, 2, 3
	k)	Structure of a C program	02	1, 2, 3
	l)	Algorithms & Flowcharts	02	1, 2, 3
	m)	Keywords, Identifiers, Variables	01	1, 2, 3
	n)	Data types	02	1, 2, 3
	o)	Types of Operator	01	1, 2, 3
	p)	Input and Output	01	1, 2, 3

References :

2)	Structured Programming approach using C – Forouzan and Gilberg, Thomson learning publications
3)	The C Programming language – Kernighan and Ritchie
4)	Complete C Reference – Herbert Schildt

Unit – II

2.		Control Structures	Lecturers Required	Ref. No.
	h)	Decision making structures, If, if-else, switch,	03	1, 2, 3
	i)	Loop Control structures, While, do-while, for	03	1, 2, 3
	j)	Break and continue.	01	1, 2, 3

References :

1)	Structured Programming approach using C – Forouzan and Gilberg, Thomson learning publications
2)	The C Programming language – Kernighan and Ritchie
3)	Complete C Reference – Herbert Schildt

Unit – III

3.		Functions in C	Lecturers Required	Ref. No.
	j)	What is a function?	01	1, 2, 3
	k)	User defined functions	01	1, 2, 3
	l)	Declaration, definition	01	1, 2, 3
	m)	return keyword	01	1, 2, 3

	n)	Storage classes	01	1, 2, 3
	o)	Recursion.	01	1, 2, 3

References :

1)	Structured Programming approach using C – Forouzan and Gilberg, Thomson learning publications
2)	The C Programming language – Kernighan and Ritchie
3)	Complete C Reference – Herbert Schildt

Unit – IV

4.		Arrays	Lecturers Required	Ref. No.
	k)	Array declaration, initialization	02	1, 2, 3, 4
	l)	Types – one, two and multidimensional,	03	1, 2, 3, 4
	m)	What is Pointer?, Pointer declaration, initialization	03	1, 2, 3, 4
	n)	Pointer to pointer	01	1, 2, 3, 4
	o)	Arrays and pointers	01	1, 2, 3, 4
	p)	Functions and pointers.	01	1, 2, 3, 4

References :

1)	Structured Programming approach using C – Forouzan and Gilberg, Thomson learning publications
2)	The C Programming language – Kernighan and Ritchie
3)	Complete C Reference – Herbert Schildt
4)	Pointer in C – YeshwantKanetkar

Unit – V

5.		Strings	Lecturers Required	Ref. No.
	j)	Declaration and initialization	01	1, 2, 3
	k)	Standard library functions,	02	1, 2, 3
	l)	Strings and pointers	01	1, 2, 3, 4
	m)	Array of strings	01	1, 2, 3

References :

1)	Structured Programming approach using C – Forouzan and Gilberg, Thomson learning publications
2)	The C Programming language – Kernighan and Ritchie
3)	Complete C Reference – Herbert Schildt
4)	Pointer in C – YeshwantKanetkar

Unit – VI

6.		Structures, Unions And File Handling	Lecturers Required	Ref. No.
	j)	Creating structures	01	1, 2, 3
	k)	Accessing structure members (dot Operator)	01	1, 2, 3
	l)	Array of structures, Nested structures	02	1, 2, 3
	m)	Pointers and structures	01	1, 2, 3, 4
	n)	Unions	01	1, 2, 3
	o)	Types of Files	02	1, 2, 3
	p)	Operations on files, Random Access to File.	02	1, 2, 3

References :

1)	Structured Programming approach using C – Forouzan and Gilberg, Thomson learning publications
2)	The C Programming language – Kernighan and Ritchie
3)	Complete C Reference – Herbert Schildt
4)	Pointer in C – YeshwantKanetkar

Name of Course	B.Sc. (Computer Science) First Year & B.Sc. (Soft. Engg.) First Year
Semester	II Semester
Name of Subject	Web Technology
Subject Code	S2.3

B.Sc. Computer Science First Year

Unit – I

1.		Introduction to Web Designing & HTML Documents	Lectures Required	Ref. No.
	q)	Historical Roots of HTML,	01	1
	r)	Web page, Website,	01	1
	s)	The Phases of Web Site Development.	01	1
	t)	Structure of HTML documents and Basic Tags: HTML, HEAD, TITLE, BODY.	01	1
	u)	Formatting Tags: Paragraph Tags, List tags, HR Tag.	01	1
	v)	Headings Tags, PRE tag, DIV tag, SPAN tag.	01	1
	w)	FONT Tag, ADDRESS tag, MARQUEE tag.	01	1
	x)	Text-Level Elements: B tag, I tag, U tag, SUP tag, SUB tag, BIG tag, SMALL tag, STRIKE tag & other different formatting tags.	01	1

References:

Sr. No.	Name of the Book	Author	Publication
1.	HTML The complete Reference -2nd Edition	Thomas A Powel	Tata McGraw Hill publication
2.	The complete Reference (HTML & XHTML)-5th Edition	Thomas A Powel	Tata McGraw Hill publication

Unit – II

2.		Technologies For Web Application	Lectures Required	Ref. No.
	k)	WWW, Web browser.	02	3
	l)	U.R.L. concept	01	1
	m)	Web server, Web protocols: HTTP, FTP, Telnet.	02	3
	n)	Hyperlink (Anchor) Tag &it's all attributes, Creating Email Hyperlinks (using mailto	02	1

		anchor).		
	o)	The Role of Images on the Web, <img> tag &its all attributes, Using Images as links.	02	1
	p)	Tables in HTML:- TABLE, TR, TH, TD tag with example, table with all Attributes,	02	1

References:

Sr. No.	Name of the book	Author	Publication
1.	HTML The complete Reference -2nd Edition	Thomas A Powel	Tata McGraw Hill publication
2.	The complete Reference (HTML & XHTML)-5th Edition	Thomas A Powel	Tata McGraw Hill publication
3.	Computer Fundamental s (6th Edition)	P. K. Sinha	BPB Publication

Unit – III

3.		Basic Interactivity	Lectures Required	Ref. No.
	p)	Frames in HTML: FRAMESET & FRAME tags & its attributes, Simple Frame Example.	02	1
	q)	Forms in HTML: Introduction to forms.	01	1
	r)	FORM element & it's attributes (Action, Method(GET, POST), Name)	01	1
	s)	Form controls: Text Controls, Password Field, Multiline Text Input, Pull-Down Menus, Check Box, Radio Buttons, Scrolled List, Reset Button and Submit button.	03	1

References:

Sr. No.	Name of the book	Author	Publication
1.	HTML The complete Reference -2nd Edition	Thomas A Powel	Tata McGraw Hill publication

Unit – IV

4.		DHTML and CSS	Lecturers Required	Ref. No.
	q)	Introduction of DHTML, Ramifications of DHTML.	02	1
	r)	Rollover Buttons.	01	1
	s)	Introduction to Cascading Style Sheets (CSS).	01	1
	t)	Embedded Styles, Inline Styles, Imported/External Styles.	03	1

	u)	Style Sheet Example.	01	1

References:

Sr. No.	Name of the book	Author	Publication
1.	HTML The complete Reference -2nd Edition	Thomas A Powel	Tata McGraw Hill publication

Unit – V

5.		**JAVA Script**	**Lecturers Required**	**Ref. No.**
	n)	The Purpose of Scripting	01	1
	o)	Introduction of JAVA Script	01	1
	p)	Adding script to documents with example.	01	1
	q)	Variables.	01	1
	r)	Input and Output statements of JAVA Script.	01	1

References:

Sr. No.	Name of the book	Author	Publication
1.	HTML The complete Reference -2nd Edition	Thomas A Powel	Tata McGraw Hill publication

Unit – VI

6.		**Web Publishing and Advanced HTML Concepts**	**Lecturers Required**	**Ref. No.**
	q)	Publishing the Site.	02	1
	r)	The Realities of Publishing and Maintaining a Web Site	01	1
	s)	introduction of Search engine optimization	02	1
	t)	Meta -Information	02	1
	u)	Overview of Client/Server Programming on the Web.	02	1

References:

Sr. No.	Name of the book	Author	Publication
1.	HTML The complete Reference -2nd Edition	Thomas A Powel	Tata McGraw Hill publication

Name of Course	B.Sc. (Computer Science) First Year & B.Sc. (Soft. Engg.) First Year
Semester	II Semester
Name of Subject	Communication and Soft Skills – II
Subject Code	S2.4

Unit – I

1.		**Language Skills**	**Lecturers Required**	**Ref. No.**
	a)	Definition	1	1, 2
	b)	Characteristics of language	2	1, 2
	c)	Listening: Process & types.	2	1, 2
	d)	Speaking: Process, speech style, etc.	3	1, 2

References:

Sr. No.	Name of the book	Author	Publication
1)	Developing Commination Skills	Krishna Mohan, Meera Banerji	MacMillan India Ltd. – 16th Edition
2)	Personality Development & Communicative English	Dr. T. Bharti, Dr. M. Hariprasad	Neelkamal Publications Pvt. Ltd., Hydrabad – 7th Edition

Unit – II

2.		**Soft Skills and Telephonic Skills**	**Lecturers Required**	**Ref. No.**
	a)	Mannerism and etiquettes	2	1, 2
	b)	Telephone etiquettes, Basic Telephone Mannerism, Handling tele-interviews, some useful expressions.	4	1, 2
	c)	Soft Skills : Negotiation Skills	2	3
	d)	Empathy skills	2	3

References:

Sr. No.	Name of the book	Author	Publication
1)	Written & Spoken English	V. H. Savant & S. R. Madan	University Press India Pvt. Ltd, Hydrabad
2)	Effective Telephone Skills	Thomas J. Farrell	Harcourt, 2 Sub-edition 1994
3)	Personality Development and Communicative English	Dr. T. Bharti, Dr. M. Hariprasad	Neelkamal Publication – 7th Edition.

Unit – III

3.		**Day-to-Day conversation**	**Lecturers Required**	**Ref. No.**
	a)	Asking questions, Giving opinion, remarks, comments, etc.	3	1, 2

			Lecturers Required	Ref. No.
	b)	Role playing	2	1, 2
	c)	Telling short/moral stories	2	1, 2
	d)	Body language and speech	3	1, 2

References:

Sr. No.	Name of the book	Author	Publication
1)	Spoken English for you	G. Radhakrishna Pillai, K Rajeevan	Emerald Publication 2008 Edition
2)	Prism	-	Board of Editions, SRTMU, Nanded

Unit – IV

4.		Presentation Skills	Lecturers Required	Ref. No.
	a)	Art of public speaking : Delivering speech, Seminars, etc.	3	1, 2
	b)	Hosting the programs : Anchoring, Vote of thanks, etc.	3	1, 2
	c)	Presentation skills: Voice Modulation, Pitch and pace.	2	1, 2

References:

Sr. No.	Name of the book	Author	Publication
1)	Art of public speaking	Dr. B. R. Kishore	New light publishers, New Delhi
2)	Developing Communication Skills	Krishna Mohan, Meera Banerji	MacMillan India Pvt. Ltd. 2005 – 16th Edition

Unit – V

5.		Report Writing	Lecturers Required	Ref. No.
	a)	Newspaper report writing	2	1
	b)	Formal report writing	2	1

References:

Sr. No.	Name of the book	Author	Publication
1)	Macmillan foundation English	R. K. Dwivedi, A. Kumar	Macmillan India Ltd – 2002 – 2nd Edition

Unit – VI

6.		Phonetics	Lecturers Required	Ref. No.
	a)	Sounds in English : Consonants & vowels	2	1
	b)	Phonetic Transcription of words	2	1
	c)	Three term label	2	1

References:

Sr. No.	Name of the book	Author	Publication
1)	A course in Phonetics & spoken English	J. Sethi, P. V. Dhamija	Prentice – Hall of India Pvt. Ltd, New Delhi – 2nd Edition

Lab Course – 3 (S2.Lab 1)

(Programming in C)

Sr. No.	Title of Programme	Required Hours
27)	Demonstrate C programming Structure	2 hours
28)	Use of data types	4 hours
29)	Use of control statements	4 hours
30)	Use of looping statements	4 hours
31)	Demonstrate input output statements	2 hours
32)	Use of user define function	2 hours
33)	Demonstrate recursion function	2 hours
34)	Use of array	2 hours
35)	Demonstrate string library function	2 hours
36)	Demonstrate pointers	2 hours
37)	Create a structure of employee & read record of five employee and display it.	2 hours
38)	Create a file student.xls and store the record of five students	2 hours

References :

1)	Structured Programming approach using C – Forouzan and Gilberg, Thomson learning publications
2)	The C Programming language – Kernighan and Ritchie
3)	Complete C Reference – Herbert Schildt
4)	Pointer in C – YeshwantKanetkar

Lab Course – 4 (S2.Lab 2)

(Web Technology)

Sr. No.	Title of Programme	Required Hours
39)	Introducing web Browser and concept of url and website	2 Hours
40)	Write a program to structure of HTML	2 Hours
41)	Write a program on formatting tags.	2 Hours
42)	Write a program on PRE, DIV, SPAN tags	2 Hours
43)	Write a program on font, address, marquee tags.	1 Hours
44)	Write a program to text level elements.	1 Hours
45)	Write a program to anchor tag with all attributes.	2 Hours
46)	Write a program on mailto anchor.	1 Hours
47)	Write a program on img tag with all attributes.	2 Hours
48)	Write a program on table tag with all attributes.	3 Hours
49)	Write a program on frame tag with all attributes.	2 Hours
50)	Write a program on user registration form using all controls and attributes of form tag.	3 Hours
51)	Write a program on rollover button.	2 Hours
52)	Write a program on css of embedded styles, inline styles, imported/external styles.	3 Hours
53)	Write a program on adding java script to documents with example.	2 Hours
54)	Write a program on input and output statements of java script.	2 Hours

References:

Sr. No.	Name of the book	Author	Publication
1.	HTML The complete Reference -2nd Edition	Thomas A Powel	Tata McGraw Hill publication
2.	The complete Reference (HTML & XHTML)-5th Edition	Thomas A Powel	Tata McGraw Hill publication
3.	Computer Fundamental s (6th Edition)	P. K. Sinha	BPB Publication