

NATIONAL COLLEGE (AUTONOMOUS)
Nationally Accredited at "A" Level by NAAC
Tiruchirapalli – 620 001
Under Graduate Programmers Structure under CBCS
(For candidates admitted from the year 2013 – 2014 onwards)
BCA

SEM	PART	Course Title	Instru. Hours / Week	Credit	Exam Hours	Marks			Total
						Int.	Extn.	O	
I	I	Language Course – I (LC)	6	3	3	25	75	-	100
	II	English Language Course - (ELC - I)	6	3	3	25	75	-	100
	III	Core Course – I (CC) – Programming in C	5	5	3	25	75	-	100
	*	Core Course– II (CC) – Programming in C Lab	3	3		15	30	5	50
		First Allied Course –I (1AC)– Mathematics-I	5	3	3	25	75	-	100
		First Allied Course –II (1AC) – Operations Research	3	-	*	-	-	-	-
	IV	Skill Based Elective – I(SBEC1) - Web Page Designing Using HTML	2	2	3	25	75	-	100
		TOTAL	30	19					550
II	I	Language Course – II (LC)	6	3	3	25	75	-	100
	II	English Language Course - (ELC - II)	4	2	3	25	75	-	100
		Communicative English – (ELC – III)	2	1	3	25	70	5	100
	*III	Core Course – II (CC) – Programming in C & C++ Lab	3	2		15	30	5	50
		Core Course– III (CC) – OOPS using C++	5	5	3	25	75	-	100
		First Allied Course –II (1AC) – Operations Research	3	3	3	25	70	-	100
		First Allied Course –III (1AC) - Mathematics-II	5	3	3	25	75	-	100
IV	Environmental Studies	2	2	3	25	75	-	100	
		TOTAL	30	21					750
III	I	Language Course – III (LC)	6	3	3	25	75	-	100
	II	English Language Course –(ELC – IV)	4	2	3	25	75	-	100
		Communication English – (ELC – V)	2	1	3	25	70	5	100
	III	Core Course – IV(CC) – Java Programming	5	5	3	25	75	-	100
	*	Core Course – V (CC) – Java Lab & PC Package Lab	2	2		15	30	5	50
		Second Allied Course – I (2AC) – Financial Accounting	5	3	3	25	75	-	100
		Second Allied Course – II (2AC) – Accounting Package Lab	2	-	*	-	75	-	-
	IV	Skill Based Elective Course – II (SBECII) – VB Script	2	2	3	25	75	-	100
	Skill Based Elective Course – III (SBECIII) – HTML and VB Script Lab	2	2	3	25	75	-	100	
		TOTAL	30	20					750

IV	I	Language Course – IV (LC)	6	3	3	25	75	-	100	
	II	English Language Course –(ELC – VI)	6	3	3	25	75	-	100	
	**III	Core Course – V (CC) – Java Lab & PC Package Lab	3	3	2	15	30	5	50	
			Core Course – VI (CC) –Digital Computer fundamentals.	5	5	3	25	75	-	100
			Second Allied Course – II (2AC) –Accounting Package Lab	3	3	3	25	70	5	100
			Second Allied Course – III (2AC) – Organizational Behaviour	4	3	3	25	75	-	100
	IV	Non Major Elective Course – NMEC1 – Basic Concepts Of Computer Science	2	2	3	25	75	-	100	
	TOTAL		30	22					650	
	III	Core Course –VII (CC) – Visual Programming Lab	5	5	3	25	75	-	100	
		Core Course – VIII (CC) – Visual Programming	5	5	3	25	75	-	100	
		Core Course – IX (CC) – Computer Networks	2	-	*	-	-	-	-	
		Core Course – X (CC) – Operating System	3	-	-	-	-	-	-	
V		Elective Course – I (ECI) – Software Engineering/Software Quality Assurance /	5	4	3	25	75		100	
		Elective Course – (ECII) – E-Commerce / Computer Graphics	4	4	3	25	75	-	100	
	IV	Non Major Elective Course – NMEC1I- Internet And Its Applications	2	2	3	25	75	-	100	
		Value Education Course - VEC	2	2	3	25	75	-	100	
		Soft skills	2	2	3	25	75	-	100	
		TOTAL	30	24					700	
VI	III	Core Course – IX (CC) – Computer Networks	3	5	3	25	75	-	100	
		Core Course – X (CC) – Operating System	3	5	3	25	75	-	100	
		Core Course –X1(CC) – PHP & Scripting Languages	6	6	3	25	75	-	100	
			Core Course – XII (CC) – PHP Lab	6	6	3	25	70	5	100
			Core Course – XIII(CC) – Project Work	6	6	3	25	75	-	100
			Elective Course – (ECIII) – Advertisement Management / Internet Concept	5	4	3	25	75	-	100
			Gender Studies	1	1	3	25	75	-	100
		TOTAL	30	33					700	
V		Extension Activities	-	1	-	-	-	-	-	
		TOTAL	180	140					4000	

For the Science Programmes oral test will be conducted for the practical papers and five marks will be allotted and to be included in the External 75 marks. I.e.45 for the Practical lab +5 for the oral test = 50 marks.

nraAs; (, ffhy , yffpak) ci uei l > rWfi j > , yffpa tuyhW > gadKi wj j kp;
- U13T1

gUtk; : l

ghl k; : l

fwgpfFk; fhyk; : 6

j ugGSSp : 3

myF - 1:

ghuj pahu; ftpi j fs; :] u] ;tj p Nj tpaPd; Gfo; ghuj ehL
ghuj pi hrd; ftpi j fs; : j kpaPd; , dpi k , dgj j kpa>
c yfk; c dDi l aJ > nfhl L KuNr
gl LfNfhl i l ahu; ftpi j fs; ci ogGk; Nj i t
, td; NrhW NghLfPwhd > mtd; \$W NghLfPwhd;
ehkf;fy; ftpQu; ghl y;fs; : , sej kpaDfF
fz z j hrd; ftpi j fs; : ghLtJ ehdyy

myF - 2:

mgJy; uFkhd; : kz ;
i tuKj J : ghuj p epi df;fggLfPwhd;
Nkj j h : nrUgGl d; xU Ngl b
kLh : Nt fk > j kpaGgW > Ruz l ykhk? > rpt gGehl h >
fhj Nyh fhj y > gof;fk; nghyyhj J
, dFyhg; : xU Gddi fr; rkpf; fahy;
mKj ghuj p : i ` f\$
ehl LgGwg; ghl y;fs; : xgghuq; ghl y; - grpahwg; Nghtj pyi y

myF - 3:

ci uei l:

ghuj pahu; - j pahdq;fS k; kej puq;fS k;
j pU. tpf. - kdij d;
c .Nt.rh - vJ j kpa?
uh.gp NrJggps; s - FbAk; gi l Ak;
K.t. - nkhop , yyhj epi y
GJ i kggj j d; - j kpa; ehfupf; j py;

fuhkthof; f

fy;fp - Gi dfspd; Nti y epWj j k;
rpvd; mz z hJ i u - gwW
R[hj h - fl Ts; , Uf;fpwhuh?

myF - 4: rWfi j:

tPbay; fhyk; - Ki dtu; , uh.ghyRgukz pad;

myF - 5:

, yffpa tuyhW - , Ugj hk; E}wwhz L
(Gj pdk> ehl fk; ebq;fyhf)

gadKi wj j kp; - tykpFk; tj pfspd; nj hFgG kpfhi kf;Fupa
tj pfs; (eyy j kp; vOj Ntz Lkh
gf;260 - 290.

ghl E)y;

- 1. nraAs> c i uei l - fy;Y)up ntspaL
- 2. rWfi j - tpbay;fhyk>
Ki dtu; , uh. ghyRgukz pad;
- 3. , yffpa tuyhW - nghJ
- 4. gadKi wj j kp; - eyyj kp; vOj Ntz Lkh>
m.fp guej hkdu> gf;260-290

nraAs; (, i l fhy , yffpak> Gj pdk> , yffpa tuyhW

nraAs; - U13T2

gUtk; : ll

ghl k; : ll

fwgpfFk; fhyk; : 6

j ugGssp : 3

myF - 1

- 1.1 j pUQhdrkgej u; Nj thuk; j pUfNfhhbfh j pUj j yk; (11 ghl yfs) , dW..
- 1.2. j pUehTffuru; Nj thuk; j pUgGfY}u; j pUj j yk; (10 ghl yfs) kUsth..
- 1.3. Rej uu; Nj thuk; j pUthi df;fh j pUj j yk; (10 ghl yfs); ki wfs;..
- 1.4. khz pff;fthrfu; j pUthrfk; - j pUntkghi t (10 ghl yfs) Mj pAk;..

myF - 2

- 2.1. Mz l hs; j pUgghi t (10 ghRuqfs) Xq;fp
- 2.2. nj hz l ubgnghbaho;thu; j pUkhi y (10 ghRuqfs) gri r
- 2.3. j pUgghz ho;thu;mkychj ppuhd; (10 ghRuqfs)
- 2.4. FyNrfuho;thu;ngUkhs; j pUnkhop (11 ghRuqfs) CNdW

myF - 3

- 3.1. - Kj ;J fFkhurhkp gpsi sj j kp; (2 ghl yfs)
- 3.2 - eej pff;fykgfk; - 5 ghl yfs;
- 3.3. - Kf;\$l wgsS - 5 ghl yfs;
- 3.4. - xsi tahu; ghl yfs; - 4 ghl yfs;
- 3.5. - fhsNkfgGytu; ghl yfs; - 3 ghl yfs;

- 3.6. - rfj pKj j gGytu; ghl y; - 1 ghl y;
- 3.7. - fkgu; ghl yfs; - 3 ghl yfs;

myF - 4

Gj pdk;- rKj ha tll p - eh. ghuj j rhuj p

myF - 5

5.1. , yffpa tuyhW

- 5.1.1. - gfj p , yffpak; [i rtk> i tz tk]
- 5.1.2. - rpwpyffpak; [gpsi sj j kp> fykgfk>gs;S
- 5.1.3 - Gj pd , yffpak;

fhggpak> ehl fk> , yffpatuyhW - U13T3

gUtk; : III

ghl k; : III

fwgpfFk; fhyk; : 6

j ugGssp : 3

myF - 1

- 1. rpyggj pfhuk; (, sqNfhtbfs) - tofFi u fhi j
- 2. kz pNkfi y (rll j i yrrhj j dhu)- Mj pi u gpi rapl j fhi j

myF - 2

- 3. fkguhkhaz k; (fkgu) - , uhkhtj huk; - fhl rpggl yk;
- 4. ngupaGuhz k; (Nrf;fphu)- Gryhu; ehadhu; Guhz k;

myF - 3

- 5. , NaRfhtpak; (fz z j hrd) - ki ygnghopT
- 6. rWhgGuhz k; (c kWgGytu) - khDf;Fg; gpi z epdw gl yk;

myF - 4 :

- 7. j z z l; j z z l; (Nfhky; Rthkpeh j d)- ehl fk;

myF - 5

- 8. , yffpatuyhW - fhggpak> Guhz k> ehl fk;

gz i l , yffpak> , yffpa tuyhW> nkhoggawrp - U13T4

gUtk; : IV

ghl k; : IV

fwgpfFk; fhyk; : 6

j ugGssp : 3

myF - 1

- 1. FWenj hi f - 10 ghl yfs; (8>18>25>40>58>99>131>135>167>196)
- 2. ewwpi z - 5 ghl yfs; (1> 3> 16> 30> 355)
- 3. I q;FE}W - 10 ghl yfs; (nryT mOq;F tjj j ggj ;J)

myF - 2

- 4. f yj nj hi f - 2 ghl yfs; (FwQrpf;fyp - 15>Ky; yf;fyp - 11)
- 5. mfehD}W - 2 ghl yfs; (129> 140)
- 6. GwehD}W - 10 ghl yfs; (95>165>182>183>184>188>194>195>204)

myF - 3

- 7. j pUf;Fws; - mwj ;J ggghy; 5 mj pfhuq;fs; (11> 13> 14> 43> 47)

myF - 4

- 8. gj ;J ggghl L - Ky; ygghl L KOtJk; (egGj dhu)

myF - 5

, yf;fpa tuyhW-vl Lj nj hi f> gj ;J ggghl L> gj pndz ; fb;f;fz f;F> nkhoggapwrp
 - nghJ f;fI Li u (nghJ mwT> ehl LeI g> rKj ha Neh;F gwwpad)

ENGLISH FOR COMMUNICATION – U13E1

Semester : I **English Language Course: I**
Instruction Hours/Week: 6 **Credit: 3**

- Unit I :** 1.Civilization and History – C.E.M. Joad
2. The Fun They Had – Issac Asimov
- Unit II :** 3. Big Numbers and Infinities – George Gamow
4. Oil – G.C. Thornley
- Unit III:** 5. An Observation and An Explanation – Desmond Morris
6. A Robot about the House – M.W.Thring
- Unit IV:** 7.A Wrong Man in Worker’s Paradise – Rabindranath Tagore
8. Making Surgery Safe – Horace Shipp
- Unit V:** 9. Using Land Wisely – L.Dudley Stam
10. The Karuburator – Karel Capek

Text Book: English through Reading, by W.W.S.Baskar and N.S.Prabu, Published by Macmillan Publishers India Ltd.,

ENGLISH THROUGH EXTENSIVE READING - U13E2

Semester : II **English Language Course : II**
Instruction Hours/Week:4 **Credit: 2**

Unit I

- R.K.Narayan An Astrologer’s Day
- Boman Desai Between the Mosque and the Temple

Unit II

O.Henry	The Gift Of the Magi
Premchand	The Child

Unit III

R.P. Sisodia	The Last Salvation
Kasturi Sreenivasan	I Prepare to gotoCoimbatore

Unit IV

F.E.B. Gray	A Slip of the Tongue
Ruskin Bond	The Eyes are not Here

Unit V

Rabindranath Tagore	The Cabuliwallah
Guy de Maupassant	The Diamond Necklace

Text book

Glimpses of Life ; An Anthology of Short Stories ; Board of Editors [Orient Longman]

COMMUNICATIVE ENGLISH I – U13CE1

Semester : II

Communicative English Course: I

Instruction Hours/Week:2

Credit: 1

OBJECTIVES

01. To Facilitate communication
02. To expose the students to various levels/types of communication.
03. To help the students achieve communicative competency

UNIT I

01. At the College
02. on the Campus
03. Outside the class

UNIT II

04. At the Post office
05. For Business and Pleasure
06. Review

UNIT III

07. Are you Smart?
08. Are you creative?
09. Is it too hard to improve?
10. How to win?

UNIT IV

11. View points
12. Snakes and ladders
13. Your Self

UNIT V**Write**

14. Circulars, notes-reminders, warnings, farewells, apology;

COMMUNICATIVE ENGLISH II – U13CE2

Semester : III
Instruction Hours/Week:2

Communicative English Course : II
Credit: 1

Unit-I:

Enriching Vocabulary – Register Development; who is who; Synonyms, antonyms, Active and Passive vocabulary, proverbs

Unit –II:

Tense Forms with emphasis on differences between Present and Present Continuous; Past and Present Perfect – Framing questions, Auxiliaries, if clauses; conjunctions, and linkers; Prepositions

Unit –III

Pronunciation, Good Pronunciation habits, R.P., Greetings, Farewells commands etc.,

Unit –IV:

Conversational Skills – Affirmative or Negative Language – idiomatic expressions, Phrases, Dialogue Writing,

Unit –V:

Writing Skills – Note- taking, note- making, e-mail- Describing an object- narrating a story

Reference Books

- i) A Practical English Grammar by A.J Thomson and A.V. Martinet.
- ii) Remedial English Grammar, by F.T. Wood.
- iii) English for competitive Examinations by R.P Bhatnagar & Rajul Bhargava.

READING POETRY AND DRAMA– U13E4

Semester : IV
Instruction Hours/Week:6

English Language Course: IV
Credit: 3

POETRY:

Unit: I	John Milton	:	On His Blindness
	Oliver Goldsmith	:	The village Schoolmaster
	William Wordsworth	:	The Solitary Reaper
UNIT II	P.B.Shelley: Ozymandias		
	John Keats	:	La Belle Dame Sans Merci
	Browning	:	Incident of the French Camp

UNIT III	John Masfield	:	Laugh and Be Merry
	Robert Frost	:	Stopping By the Woods On a Snow Evening
	John Drink water	:	The Vagabond

DRAMA:

Unit: IV	Anton Chekhov	:	The Bear
	Norman Mckinnel	:	The Bishop's Candlesticks
Unit: V	Fritz Karinthy	:	Refund
	F.M. Synge	:	Riders to the Sea.

Textbooks:

- 1) **An Introduction to Poetry** edited by A.G.Xavier; [Macmillan]
- 2) **Nine Modern Plays:** ed. B.T Reddy, Oxford University Press

CORE COURSE I - PROGRAMMING IN C – U13CA1

Semester	: I	Core Course : I
Instruction Hours/Week	: 5	Credit : 5

UNIT – I

Evolution and Application of C – Structure of a C Program – Data types – Declarations – Operators – Expressions – Type Conversions – Built – in Functions.

UNIT – II

Data Input and Output – Control Statements: IF, ELSE – IF, GOTO, SWITCH, WHILE – DO, DO – WHILE, FOR, BREAK and CONTINUE.

UNIT – III

Functions: Defining and Accessing Arguments – recursive functions – storage classes – Arrays: Defining and processing Arrays – Multidimensional arrays – passing arrays to functions – Arrays and strings – String Functions – String Manipulations.

UNIT – IV

Pointers – Pointer Declarations – Operations on Pointers – Pointers to Functions – Pointer and Strings – Pointers and arrays – arrays of Pointers – Structures – Structures and Pointers – Unions.

UNIT – V

Data files – Opening, Closing and processing files – files with structures and Unions – register variables – Bitwise Operations – Macros - Preprocessing.

Text Book:

“Programming in C “ – E.Balagurusamy – Tata McGraw Hill Publications.

Books for Reference:

1. “Programming with C” – Byron S.Gottfried – Schaum’s outline series – Tata McGraw Hill Publications.
2. “The Sprit of C “– Mullish cooper – Schaum’s Outline Series – Tata McGraw Hill Publications.
3. “A first course in Programming with C “- T.Jeyapooan.Vikes Publishing House Pvt.Ltd, New Delhi.

Programming in C & C++ Lab – U13CA2P

Semester : I & II

Core Course : II

Instruction Hours/Week : 3+3

Credit : 2

Programming in C Lab

1. Sum of Series (sine, cosine, exponential).
2. Ascending and descending order of numbers using Arrays (Use it to find Largest and Smallest Numbers).
3. Matrix operations (Addition, Subtraction, Multiplication) – using functions
4. Finding factorials, generating Fibonacci Numbers using recursive functions.
5. String manipulations without using string functions (string length, string comparison, string copy, palindrome checking, counting words and lines in strings (Use function pointers).
6. Program to prepare purchase report using pointers
7. Program to prepare Mark Sheet using files.

Programming in C++ Lab

1. Program to implement classes, create object and member functions.
2. Functions using
 - i) Call by value
 - ii) Call by reference
 - iii) Recursive call
3. Class and All types of Constructors.
4. Program to implement the concept of function overloading
5. Program to implement the concept of Operator overloading.

6. Program to implement the concept of Inheritance.

7. Program to implement file handling concepts.

OOPS Using C++ - U13CA3

Semester : II

Core Course : III

Instruction Hours/Week :5

Credit : 5

Objective:

To introduce the concepts of object oriented programming and to impart the programming skills in C++.

Unit - I

Object Oriented Programming - Advantages of OOP - Characteristics of OO languages - C++ programming basics - Functions: Simple Functions- Call by value - Call by reference - Returning values of different type -Function overloading - inline functions - Default arguments - Recursive functions.

Unit - II

Class - Objects - Constructors - Destructors - Objects as function arguments - Returning objects from functions - Structures and Classes -Static data - Static function - Array of objects.

Unit - III

Access specifiers - Friend function - Friend class - Operator overloading - Type casting - Pointers - Template.

Unit - IV

Inheritance - Derived class constructors - Class hierarchies - Types of inheritance - Virtual base class - Function overriding - Virtual functions -Pure virtual functions - Abstract class.

Unit - V

Files and Streams: I/O manipulators - Streams - String I/O - Character I/O - Object I/O - I/O with multiple objects - File pointers - Disk I/O with member functions.

BOOK FOR STUDY:

1. Robert Lafore, "Object-Oriented Programming in Microsoft C++", Galgotia Publications, New Delhi, 2000.

BOOK(S) FOR REFERENCE:

1. E.Balagurusamy, "Object-Oriented Programming with C++", Second Edition, 2002.
2. Bjarne Stroustrup, "The C++ Programming Language", Addison- Wesley, New York, 1999.

CORE COURSE – IV

JAVA PROGRAMMING – U13CA4

Semester : III

Core Course : IV

Instruction Hours/Week : 5

Credit : 5

UNIT – I

Object Oriented Fundamentals - Class: – Objects – Constant -Variable – Constructors – Methods – ‘this’ keyword – Wrapper Classes – Static and Abstract Classes – Exception handling.

UNIT – II

Inheritance: Super class – Sub class – ‘Super’ Keyword – method overriding – Private, Public and Protected – Packages – Interfaces – Final and Finalize – String Handling.

UNIT – III

GUI: AWT Components – Layout – Event model – Graphics.

UNIT – IV

Applets – Applet tags in HTML – Threads – Multithreads – Stream I/O and files.

UNIT – V

Servlets – JDBC – Networking.

BOOK(S) FOR STUDY

1. Patrick Naughton and Herbert Schildt, "JAVA 2 – The Complete Reference", Tata – McGraw – Hill, New Delhi, 1999.

BOOK(S) FOR REFERENCE

1. Patrick Naughton, "JAVA Hand Book", Tata – McGraw Hill, New Delhi, 1996.

CORE COURSE – V

JAVA Lab & DATABASE SYSTEMS – U13CA5P

Semester : III & IV

Instruction Hours/Week : 2+3

Core Course : V

Credit : 5

1. Create a Program using Classes – Objects.
2. Implement multiple inheritance concepts in java using interface, you can choose your own example of a company or education institution or a general concepts which requires the use of interface to solve a particular problems.
3. Create a user defined package in java which consists of the following classes
 - (a) Random number generation
 - (b) Calculation of area for various geometrical figures.
4. The details of students in I year B.Sc like name, roll no, address, sex, age etc, has to be stored and retrieved whenever requested for by specifying the roll no. Implement this concept using a dynamic Array (vector synchronization).
5. Implement the concept of interfaces and package.
6. Create a Program using Applet to draw a Traffic Signal
7. Develop a Multithread program to move the ball around the screen in all the four direction.
8. Create a BIO – DATA by Using AWT form design

CORE COURSE – VI – U13CA6
DIGITAL COMPUTER FUNDAMENTALS

Semester : IV

Core Course :VI

Instruction Hours/Week : 5

Credit : 5

UNIT 1 :

Number Systems and Codes: Decimal, Binary, Octal and Hexadecimal Systems –Conversion from one to another – Complements; Binary Addition, Subtraction, Multiplication & Division; Codes: BCD, Weighted, Excess Three, Gray, ASCII and Error Detecting Codes.

UNIT 2 :

Boolean Algebra: Fundamental Concepts – Boolean Functions and Expressions – Truth Tables – Laws and Theorems; Simplification of Expressions – Karnaugh Map & Tabulation Methods. Digital Logic & Circuits: AND, OR, NOT, NAND, NOR, XOR Gates; Integrated Circuits – TTL & MOS Logic Circuits; Gating Networks.

UNIT 3 :

Logic Design: Flip-Flops – Transfer Circuits – Clocks – Shift Registers – Counters –State Diagrams and State Tables – Magnitude Comparator – Programmable Arrays of Logic Cells.

UNIT 4 :

Elements of ALU: Design and Implementation of Binary Adders (Half and Full) and Subtractors; BCD Adder; Multiplexers, Floating – Point Number Systems – Arithmetic Operations with Floating Point Numbers.

UNIT 5 :

Memory Elements: RAM, Decoders, Dynamic Random Access Memories; Read Only Memories; Magnetic Tapes; Magnetic Bubble and CCD Memories.

TEXT BOOK:

1. Digital Computer Fundamentals – Thomas C. Bartee, 6th Edition, Tata McGraw Hill, New Delhi,

REFERENCE BOOK:

1. Digital Design – Morris Mano, Prentice Hall.

CORE COURSE VII – U13CA7P
VISUAL PROGRAMMING & RDBMS LAB

Semester : V

Core Course : VII

Instruction Hours/Week : 5

Credit : 5

RDBMS LAB

1. Table Creation & data insertion, deletion & updation
2. DML : Aggregate functions, set operations & nested queries
3. PL/SQL - block using cursors

4. Functions & procedures
5. D2K : insertion, deletion & updation through forms
6. Calling other forms & reports.

VISUAL PROGRAMMING LAB

- 1.For Scrolling text on Client area using Scale Properties
- 2.Divide the Client area into 8*8 cells and while moving the mouse on the cells, the shape of the cursor should change in every cell.
- 3.Use the circle method to draw several ellipses and circles so that they have the appearance of a pair of eyes.
- 4.Write code to develop calculator program which include basic mathematical functions like square root,inverse, square,multiplication ,division,cosine.
- 5.Develop a window environment which accepts the filename as input and displays the contents of the selected file .The environment shold include the options as filename listing,Types of file listed,Directory and drive listing. After the listing give provisions to confirm and cancel the selection.
- 6.Create a designer with basic primitives like circle,square,rectangle,ellise and fill the same name.
- 7.Write a program to expand and shrinking Objects- While a Program is Running.
- 8.Write a program to create animation by using the move method and timer object.

CORE COURSE VIII– U13CA8

VISUAL PROGRAMMING

Semester : V
Instruction Hours/Week :5

Core Course : VIII
Credit : 5

UNIT-I

Introduction to Visual Basic – Integrated Development Environment (IDE) features - VB editor - customizing the IDE - Anatomy of a form - Working with form properties - setting form's properties - Introducing form events & form methods.

UNIT- II

Variables in Visual Basic: Declaring variables - Data types - Null value, Error value,Empty value - The scope of a variable - Module level variables - constants – Creating your own constants - scope of a constant - converting data types - arrays -declaring arrays - fixed size arrays - dynamic arrays -preserve keyword –REDIM Writing code in Visual Basic: The anatomy of a procedure - subroutine and functions - language constructs: for, next, the while loop, select case, Exit statement, with structure.

UNIT-III

Selecting & using controls: Introducing to standard controls - Command buttons – Text Buttons - Text buttons - levels - option buttons -check boxes -frame controls -list boxes - combo boxes - Image objects - picture boxes -Timer - scroll bars - file system controls

UNIT-IV

Introduction to Built In Active X Control: Tool bar - the treeview control - the Listview control - the Imagelist control - common Dialog control - Status bar control – Rich textbox control - Menu Editor.

UNIT-V

DDE properties - DDE Events -DDE methods -OLE properties - Active X control creation and usage and Active X DLL creation and usage -Data Base Access - Data control - Field control - Data Grid Record set using SQL to manipulate data - Open data connectivity (ODBC)

Text Book

Mohammed. Azam, Programming with Visual Basic 6.0- VIKAS publishing House pvt. Ltd.,

ELECTIVE COURSE – I

SOFTWARE ENGINEERING – U13CA9E

Semester : V
Instruction Hours/Week : 5

Elective Course : I
Credit : 4

UNIT I

Introduction to Software Engineering: Definitions - Size factors – Quality and Productivity Factors – Managerial Issues. The Product: The evolving role of software – Software – characteristics - applications. The process: Software engineering: A Layered Technology – The software process – Evolutionary software process models: Spiral model.

UNIT II

Planning a Software Project: Defining the problem – Developing a solution Strategy –Planning the development Process – Planning an organizational structure – Other Planning Activities.

UNIT III

Software Cost Estimation: Software Cost Factors – Software Cost Estimation Techniques – Staffing Level Estimation. Software Requirements Definition: The Software Requirements Specification – Formal Specification Techniques.

UNIT IV

Software Design: Fundamental Design Concepts – Modules and Modularization Criteria – Design Notation – Design techniques – Design Guidelines. Implementation Issues: Structured coding techniques – coding style – Documentation guidelines.

UNIT V

Verification and Validation Techniques: Quality Assurance – Walkthroughs and inspections – Static analysis – Unit testing and debugging – System testing – Formal verification.

Text Books:

1. Richard E. Fairley – “Software Engineering Concepts”, Tata McGraw Hill Publication, 1997 edition.
2. Roger S. Pressman – “Software Engineering A Practitioner’s Approach”, 5th edition, McGraw Hill, 2001.

Reference book:

1. Watts S. Humphrey – “A Discipline for Software Engineering”, Addison Wesley Company, 1995.

(OR) ELECTIVE COURSE –I

SOFTWARE QUALITY ASSURANCE – U13CA9E

Semester : V
Instruction Hours/Week : 5

Elective Course : I
Credit : 4

UNIT – I

Software Quality in Business Context : Defining Quality – Need for Quality – Quality Control Vs Quality assurance – Quality assurance at each phase of SDLC. Managing software Quality in an organization: QMS – Need for SQA group in an organization. Planning for SQA: Software Quality assurance plans – Organizational level initiatives. (Chapters 1.1, 1.3 – 1.5, 2.1, 2.4, 3.1, 3.2)

UNIT – II

Product Quality and Process Quality: Introduction – Software systems evolution – Product Quality – Models for software product Quality – Process Quality. Software Measurement and Metrics: Introduction – Measurement during s/w life cycle context – Defect metrics – Metrics for s/w maintenance – Classification of s/w metrics – Requirements related metrics – Measurements and process improvement – Measurement principles. (Chapters 4, 5.1 – 5.9)

UNIT – III

Walkthroughs and Inspections: Introduction – Structured walkthroughs – Inspections – Various roles and responsibilities involved in Reviews / Inspections – Some psychological aspects of reviews. Software Configuration Management: Need for SCM – Software configuration management activities – Personnel in SCM activities. (Chapters 6.2 - 6.6, 7.2, 7.3, 7.5)

UNIT – IV

ISO 9001 : ISO 9000 – Origin of ISO 9000 – Work of ISO – ISO standards development process.
ISO 9001 : 2000 – ISO Certification – Assessment / Audit preparation –Assessment process - ISO consulting services and consultants. Software CMM and other Process Improvement Models: The Capability Maturity Model for software - An overview – Practices followed at mature organizations Types of CMM Models. (Chapters 8.2 – 8.5, 8.7, 8.9, 8.10, 8.11, 9.2, 9.3, 9.5)

UNIT – V

Software Testing : Purpose of testing – Differences between inspection and testing – Testing Vs debugging – Testing life cycle – Roles and responsibilities in testing – Test artifacts – The test plan – The V- Model for testing phases – Testing techniques – Test metrics - Risk-based testing – Human issues and challenges in testing.(Chapter 10 Except 10.13, 10.14, 10.15, 10.17)

TEXT BOOK :

1.Nina S. Godbole, Software Quality Assurance Principles and Practice, Narosa publishing house.

REFERENCE BOOKS :

1. Alan C. Gillies, Software Quality (Theory and Management), Second Edition, Thomson International student edition.
2. Mordechai Ben – Manachem, Garry S. Marliss – Software Quality, Producing Practical, Consistant Software, Thompson Learning.

ELECTIVE COURSE – (ECII) – E-COMMERCE – U13CA10E

Semester : V

Elective Course : II

Instruction Hours/Week : 4

Credit : 4

UNIT -I

E-Commerce-Electronic Commerce - E-Commerce types - E-Commerce and world at the large - E-Commerce Case studies : Intel, Amazon

UNI -II

Electronic Mail – The X,400 Messages handling system – Internet addresses – Muiltpurpose Internet mail Extension – X.500 Directory Services – E-Mail User agent.

UNIT -III

EDI- Costs and benifits – Components of EDI Systems – EDI implementation issues – EDIFACT – EDIFACT Message Structure.

UNIT- IV

Cyber Security – Cyber Attacks – Hacking – SSL – Authentication and assurance of DATA integrity – Cryptographic based solution – Digital Signatures – VPN.

UNIT- V

Electronic Payment Systems – Payment gateway – internet banking – the SET protocol – E-Cash – E-Cheque – Elements of electronics payments

TEXTBOOK:

“E-Commerce – The Cutting Edge of Business” 2-edition by Kamalesh.K balaji, Debjani Nag – Tata Mc Graw Hill

REFERENCE BOOK :

1. “Frontiers of E-Commerce “by Ravi Kalakota and Andrew B.Whinston – Pearson edu
2. “E-Commerce : Doing Business through internet “ by S.Jaiswal – Galgotia pub - 2001

(OR)

Elective Course (ECII) - COMPUTER GRAPHICS – U13CA10E

Semester : V

Instruction Hours/Week : 4

Elective Course : II

Credit : 4

Unit I

A survey of computer graphics: Computer aided design – Presentation graphics –computer art – Entertainment – Education and training – Visualization – ImageProcessing – Graphical user interfaces.Overview of graphics systems: Video display devices – Raster-scan systems – Randomscansystems – Graphics monitors and workstation – Input devices – Hard-copy devices – Graphics software.

Unit II

Output primitives: Points and lines – Line-drawing algorithms – DDAM algorithm –Bresenham’s line algorithm – Circle-generating algorithms – Filled-area primitives –Boundary-fill algorithm.

Unit III

Attributes of output primitives: Line attributes – Area-fill attributes – Character attributes – Bundled attributes – Inquiry functions – Antialiasing

Unit IV

Two-dimensional Geometric transformations: Basic transformations – Matrix representations – Composite transformations – Other transformations.

Unit V

Window-to-viewport coordinate – Two-dimensional viewing functions – Clipping operations – Point clipping – Line clipping – Polygon clipping.

Text book:

1. Computer Graphics C Version Second Edition, Donald Hearn and M.Pauline Baker, Pearson Education, 2006.

Core Course – IX (CC) – Computer Networks – U13CA11

Semester : V & VI

Core Course : IX

Instruction Hours/Week : 2+3

Credit : 5

UNIT- I

Introduction: uses of computer networks - network hardware - network software - reference models - example networks - network standardization

UNIT- II

The physical layer: guided transmission media - wireless transmission – communication satellites - the public switched telephone network

Unit -III

The data link layer: data link layer design issues - error detection and correction - elementary data link protocols - sliding window protocols

UNIT- IV

The network layer: network layer design issues - routing algorithms - congestion control algorithms- quality of service – internetworking

UNIT -V

The transport layer: the transport service - elements of transport protocols - a simple transport protocol the application layer: dns--domain name system - electronic mail – the world wide web

Text Book:

1. Computer Network , Fourth edition, Andrew S. Tanenbaum, Prentice Hall, 2006.

CORE COURSE – X – U13CA12

OPERATING SYSTEMS

Semester : VI

Core Course : X

Instruction Hours/Week : 6

Credit : 5

UNIT 1:

Evolution of operating systems- Functions – Different views of OS – Batch processing, Multiprocessing, Time sharing OS – I / O programming concepts – Interrupt Structure & processing

UNIT 2:

Memory Management – Single Contiguous Allocation- Partitioned Allocation –Relocatable Partitions allocations – Paged and Demand paged Memory Management –Segmented Memory Management – Segmented and Demand paged Memory Management – overlay Techniques – Swapping

UNIT 3:

Processor Management – Job Scheduling – Process Scheduling – Functions and Policies – Evolution of Round Robin Multiprogramming Performance – Process Synchronisation – Wait and Signal mechanisms – Semaphores P & V Operations – Deadlock – Banker’s Algorithm.

UNIT 4:

Device Management – Techniques for Device Management – I/O Traffic Controller, I/O Scheduler, I/O Device Handlers – Spooling.

UNIT 5:

File Management: Simple File System, General Model of a File System, Physical and Logical File System. Case Studies: MSDOS, UNIX.

TEXT BOOK:

1. Operating Systems – E. Madnick & John J. Donavan, Tata McGraw Hill Pub., Co.,
2. Distributed Operating Systems – Pradeep K. Sinha , Prentice – Hall of India Pvt. Ltd.,

REFERENCE BOOK:

1. System Programming and Operating Systems – D.M. Dhamdhere, Tata McGraw Hill Publishing Co., Limited.

CORE COURSE –XI – U13CA13-PHP & SCRIPTING LANGUAGES

Semester : VI

Core Course : XI

Instruction Hours/Week : 6

Credit : 6

UNIT I

PHP: Server side scripting Language: Basic syntax - Types - Variables - Constants - Expressions - Operators - Control Structures

UNIT II

PHP: Functions - Classes and Objects – HTML Basics –PHP access Specifiers.

UNIT III

Advanced concepts in PHP- Sessions, Cookies, PHP server Variables , HTTP Header Function.

UNIT IV

File Handling –Working with Databases –and FTP.

UNIT V

Ajax –Getting Started with Ajax-Creating and opening XML-HTTP request object-Handling downloaded data-Ajax with some PHP-Passing Data to the server with GET and POST. Advanced Ajax :- Handling Concurrent Ajax request with Multiple XMLHttpRequest Objects- Handling Concurrent Ajax request with an XMLHttpRequest array- Handling Concurrent Ajax request with Javascript Inner

Functions –Downloading Images using Ajax-Downloading javascript with Ajax-Connecting to Google suggest-Connecting to other Domains using Ajax.- Drawing Images on the Server.

BOOK(S) FOR STUDY

- 1. Web Programming using PHP and MySQL-Dr.K.Meena,Dr.R.Sivakumar,A.B.Karthick Anand Babu – Himalaya Publishing House.
- 2. The PHP Complete Reference 5.2 – Steven Holzner – Tata McGraw-Hill Edition.

Reference Books:

- 1. Spring into PHP5 – Steven Holzer, Tata McCraw Hill Edition.
- 2. Ajax Bible- Steven Holzer , Tata McCraw Hill Edition.

CORE COURSE XII – U13CA14P- PHP LAB

Semester : VI **Core Course : XII**
Instruction Hours/Week : 6 **Credit : 6**

- 1. Develop a PHP program using controls and functions
- 2. Develop a PHP program and check message passing mechanism between pages.
- 3. Develop a PHP program using String function and Arrays.
- 4. Develop a college application form using MYSQL table.
- 5. Develop a PHP program using parsing functions (use Tokenizing)
- 6. Develop a PHP program and check Regular Expression,
- 7. Develop a PHP program and Check HTML functions.
- 8. Develop a PHP program for Hashing functions.
- 8. Develop a PHP program for Network functions.
- 9. Develop a PHP program for Date and time functions.
- 10. Develop a PHP program using session.

U13CAP15 – PROJECT

Semester : VI **Core Course : XIII**
Instruction Hours/Week : 6 **Credit : 6**

PROJECT WORK

Elective Course – (ECIII) – Advertisement Management – U13CA16E

Semester : VI **Elective Course : III**
Instruction Hours/Week : 5 **Credit : 4**

UNIT-I INTRODUCTION

Nature, scope and types of advertising, Role of advertising for business units. Economics, Social and ethical aspects of advertising.

UNIT-II- ADVERTISING STRATEGY, PLANNING AND BUDGETING

Devising advertising strategy, Objectives and process of advertising budgeting models. Advertising budget allocation, decision making related to advertising.

UNIT-III- ORGANISING ADVERTISING CAMPAIGNE

Planning and organizing advertisement campaign creativity in advertising campaign: Copy writing and layout: various advertising media and their selection. Displays and role point of purchase advertising.

UNIT-IV- ADVERTISING AGENCIES:

Advertising agencies- their organization,functions need-utility and co-ordination with client. Selection of advertising agency- agency compensation.

UNIT-V- EFFECTIVENESS AND CONTROL:

Methods of measuring advertising effectiveness: Cost benefit-analysis, social and legal control of advertising, role of consumer’s organization.

Text Book Recommended:

Rathor, B.S. Advertising Management-Himalaya Publishing House

Reference:

- 1. Myers-Advertising Management-PHI
- 2. Norms-Advertising-PHI

Elective Course – (ECIII) – U13CA16E-(OR) - INTERNET CONCEPTS

Semester : VI

Elective Course : III

Instruction Hours/Week : 5

Credit : 4

UNIT-I

Internet and the World wide web: The world wide web.Browsing the web-Web address-web browser basics-Strong and managing(book marks)-Surfing the web with web browser(APPLE CYBER DOG, LYNX, HOT JAVA,Microsoft Internet Explorer-Netscape Navigator)

Unit II

Searching the web directory-search engines-navigation tools.

UNIT-III

Email: Sending-Reading-Replying-Deleting-Exiting-Sending Mail to more than one person-sending folder-forwarding a mail

Unit IV

Checking the spelling-attachments. Usenet-Telnet-FTP-Chat-News group’s.

UNIT-V

Html: Overview of HTML-adding structure to a page formatting text and pages-linking page to the world-including picture-clearing lists-arranging items within tables-getting feedback from form splitting a page into frames.

BOOK(S) FOR STUDY

1. Joe krayank & Joe Habraken, " Internet 6 in 1", Prentice Hall of India Private Limited, New Delhi, 1998.
2. Internet Complete, BPB publications, New Delhi,1998.

BOOK(S) FOR REFERENCE

1. Christina Crumlish: The Internet, BPB Publications, New Delhi, 1998.

Allied Mathematics I – U13AMS1C

Semester : I

Allied Course : I

Instruction Hours/Week :5

Credit : 3

UNIT-I

Algebraic and Transcendental equations: Finding the root of the equation using Bisection method, Newton Raphson method, Iteration method, Method of false position.

Book I : Chap2: (sec 2.1-2.5)

UNIT-II

Finite differences-forward, backward differences-Newton's forward and backward difference interpolation formulae. Lagrange's interpolating polynomial.

Book I : Chap 3: (sec 3.3.1,3.3.2,3.6,3.9.1)

UNIT-III

Diagrammatic and Graphical Representation of Numerical Data - Formation of Frequency Distribution -Histogram, Cumulative Frequency – Polygon and Ogives - Measures of Central Tendency - Measures of Dispersion - Moments and Measures of Skewness and Kurtosis.

Book II: Chap 4 (Page no.27-49),Chap 5(Page no.50-84),Chap 6,7

UNIT-IV

Theory of Probability - Definitions of Probability - Sample Space - Probability of an Event - Independence of Events - Theorems on Probability - Conditional Probability - Baye's Theorem.

Book II: Chap 14(Page no.370-408)

UNIT-V

Correlation and Regression - Properties of Correlation and Regression Coefficients - Numerical Problems for Finding The Correlation and Regression Coefficients.

Book II: Chap 8(Page no.177-223), Chap 9(Page no.224-255)

Text Books:

1. Introductory Methods of Numerical Analysis, S.S.Sastry, fourth edition, 2010, PHI(P)Ltd.
2. Business Statistics, P.R.Vittal, 2001, Margham Publication.

Allied Mathematics – II – U13AMS2C

Semester : I&II

Allied Course : II

Instruction Hours/Week :3+3

Credit : 3

Unit I

Operations Research: Introduction-Basics of OR-Linear Programming formulations & graphical solution of two variables – Canonical & standard forms of LPP. Simple Method: Simplex Method for $<, =, >$ constraints- Charne's method or penalties method

Chapter 2(sec2.1,2.2) ,Chapter 3(sec3.1-3.5) ,Chapter 4(sec4.3,4.4)

Unit II

Transportation problem: Finding the IBFS by North West corner rule, Least cost method, VAM method. Optimal solution by MODI method – Degeneracy in Transportation Problem, Unbalanced transportation problem and Maximization problem

Chapter 5 (sec5.1-5.3,5.7,5.9) ,Chapter 10 (sec10.1-10.3,10.9,10.12,10.14)

Unit III

Assignment algorithm – Balanced assignment problem- Unbalanced assignment problem, travelling sales man problem. Game theory – introduction- saddle point (with and without)-mixed Strategy.

Chapter 11 (sec11.1-11.4,11.6) ,Chapter 17 (sec17.1-17.5)

Unit IV

Sequencing problem: Processing of n jobs through two machines – Processing of n jobs through 3 machines- processing of two jobs through m machines.

Chapter 21 (sec21.1,21.7)

Unit V

Networks: Network – Fulkerson’s rule – measure of activity – PERT computation – CPM computation- Resource scheduling

Chapter 12 (sec12.1-12.6)

TEXT BOOK(S)

1. Man Mohan & Gupta , Operations Research, Sultan Chand Publishers, New Delhi

REFERENCE(S)

1. Prem Kumar Gupta and D.S. Hira, Operations Research: An Introduction, S.Chand and Co., Ltd. New Delhi,
2. Hamdy A.Taha, Operations Research (7thEdn.),McMillan Publishing company, New Delhi, 1982.

Allied Mathematics – III – U13AMS3C

Semester : II

Allied Course : III

Instruction Hours/Week :5

Credit : 3

UNIT – I

Integration - Integrals of functions containing linear functions of x -Integrals of functions involving a^2+x^2 - integrals of rational algebraic functions - Integration of irrational functions.

Book 1: Chap. I sec 6.1, 6.2, 7 (Omit 7.4), 8 case (i) to (iv) only
Page no: 7-13, 23-31, 39-47.

UNIT – II

Properties of definite integrals - Simple applications - Integration by parts - Bernoulli's formula.

Book 1: Chap. I Sec. 11, 12, 15
Page no: 61-72, 93, 94.

UNIT – III

Differential equations of first order - Variable separable -Homogeneous equations – Non homogeneous equations - Linear equation -Bernoulli's equation.

Book 1: Chap 4: Sec 1-5
Page no: 205-218.

UNIT – IV

Second order Linear equations with constant co-efficient – Particular integrals for e^{kx} , $\sin kx$, $\cos kx$, x^n and $e^{kx} X$.

Book 2: Chap 2

Page no.49-74

UNIT – V

Laplace transform - Definition - Some general theorems – Inverse Transform.

Book 1: Chap 7: Sec 7.1, 7.2, 7.3, 7.4, 7.5

Page no: 289-308.

Text Book:

1. Ancillary Mathematics, Vol-II (2009), S. Narayanan, R. HanumanthaRao, T.K.

Manicavachagam Pillay, Kandaswamy.

2. Calculus, volume III, S. Narayanan, , T.K. Manicavachagam Pillay.

FINANCIAL ACCOUNTING - U10ACO1C

Semester: III

Second Allied Course: I

Instruction Hours/Week: 5

Credits: 3

UNIT : I

Meaning of accounting – concepts & conventions, principles of Double entry – Journal and ledger accounts.

UNIT : II

Subsidiary books – purchase day book, sales day book, cash book, Analytical Petty cash book.

UNIT : III

Rectification of errors – Depreciation account (Fixed installment method – Written down value method)

UNIT : IV

Preparation of Final accounts - Trading account, profit and loss account – Balance sheet – adjusting and closing entries (simple problems only).

UNIT : V

Computer Accounting and Algorithm – Areas of application of computer in Accounting - features and advantages of computers and computer accounting Algorithm, Requisites of an effective Algorithm, Features of algorithm.

Theory 30 Marks & Problem 45 Marks

Test Books Recommended:

1. **Financial Accounting** – T.S. Reddy and A. Murthy – Margham Publications.

2. **Financial Accounting** – B. Charumathy and L. Vinagayam – S. Chand & Company.

3. **“Advanced Accounting”** by Jain & Narang, KALYANI Publishers, New Delhi.

Books for Reference:

1. Advanced Accountancy – M.C. Shukla T.S. Gerwal & Sculpture Gupta – S. Chand and co.,

2. Fundamentals of Advanced Accounting – Volume I Pillai and Bagavathy S. Chand & co.,

ACCOUNTING PACKAGE LAB - U10ACO2CTP

Semester: III & IV

Second Allied Course: II

Instruction Hours/Week: 2+3

Credit: 3

UNIT : I

Computer and Accounting – Role of Computer and Computing – Fundamentals of Computerized Accounting – Computerized Accounting Vs Manual Accounting Features of Tally.

UNIT : II

Procedure for creating a new company – Directory Name/ Mailing Name / Address / Groups creation – Editing and Deleting Groups.

UNIT : III

Display of predefined vouchers – Vouchers creations and alteration of vouchers while or after entering transaction – Types of vouchers – Payment voucher – Receipt Voucher – Sales Voucher – Purchase Vouchers.

UNIT : IV

Ledger – Groups in Tally – Primary groups, sub groups, creation of ledger – Process of creation of ledger – Balance sheet at the Gateway of Tally – Method of showing Trading – Profit and Loss account and Balance Sheet.

UNIT : V

Creation of Inventory Reports-creation of stock categories – Stock items – Stock groups.

Text Books Recommended

1. Tally – Accounting Software S. Palanivel – Margham Publications

2. Computer Application in Business – Dr. Rajkumar

Note:

Theory 40% ——— Internal 10 Marks - External 30 Marks

Practical 60% ——— Internal 15 Marks - External 40 Marks

Viva Voce 5 Mark

ORGANISATIONAL BEHAVIOUR - U10ACO3C

Semester: IV

Second Allied Course: III

Instruction Hours/Week: 5

Credit: 3

Objective:

To enable the students to understand concepts of organizational behavior fundamentals, tools and its significance in the liberalized of business environment.

Unit I:

Organizational behavior - Concept– Nature and scope of Organizational behavior – Need for studying Organizational behavior – Models of Organizational behavior.

Unit II:

Individual behavior and human behavior – theories of Personalities – process of perception.

Unit III:

Concept of attitude – Concept of Value - Job Satisfaction – Learning Theory.

Unit IV:

Group behavior – Reason for group formation by people – Group Cohesiveness – Job stress – Job frustration.

UNIT : IV

Unit V:

Concept of leadership – qualities of effective leadership – Leadership styles - Power and Authority – Theories of Motivation.

Text Book Recommended:

Organizational behavior – L.M. PRASATH

Books for Reference:

1. Organizational behavior – SS Khanka – S Chand and Co.
2. Organizational theory and behavior – V.S.P. RAO & D.S. NARAYANA

WEB PAGE DESIGNING USING HTML – U13SBE1C

Semester : I

Skill Based Elective Course : I

Instruction Hours/Week :2

Credit : 2

UNIT-I

Introduction to Internet – Definition-Connecting to the Internet-Physical Connections- Telephone Lines- E-mail- Protocol address-Internet Address-Modem Basics

UNIT-II

Internet Browser – Internet Explorer- Introduction to HTML - History of HTML, HTML Documents, Anchor Tag, Hyper Links. Head and body sections

UNIT-III

Header Section - Title, Prologue, Links, Colorful WebPage, Comment Lines.- Designing Body Sections -Heading printing, aligning the headings

UNIT-IV

Horizontal rule,Paragraph, Tab Settings, Lists, Unordered Lists, Ordered Lists. Layout with tables

UNIT-V

Advanced Layout: Frames and Layers-HTML and other media types-Style Sheets-Programming and HTML Forms-Introduction to scripting

Text Book

1. C.Xavier World wide web Design with HTML Tata MC Graw Hill,New Delhi,1991.
2. Joel Sklar, Web Design Principles Vikas Publications 2000.

VB Script – U13SBE2C

Semester : III

Skill Based Elective Course : II

Instruction Hours/Week : 2

Credit : 2

UNIT I:

Introduction to VB script-Difference between VB and VBScript-programming in VB script (Simple program: Insert a script-Write text using VB script-Write text using VB script-Format script with html tags-a function in head section-a script in body section)-data type-program flow.

UNIT-II:

Introduction to procedure in scripts-Intrinsic function-Basic function-String function-Conversion function-Math function-Time and date function-Boolean function.

UNIT-III:

Intrinsic controls-Intro to events in VB script-Message to GUI Environment-placing controls in HTML-Intrinsic control checkbox-Select using controls in your document.

UNIT-IV:

Scripting models windows, document frames-documents object using document property and methods-History object-Navigator object-Location object-Link object.

UNIT-V:

Error handling-handling errors in VB script pages-coding to avoid errors-coding to handle errors-looking examples of error handling.

Reference Book:

VB script in 21 days sams publishing 2004.

VB script Bible-Good Man2002.

Prescribed Book:

VB script unleashed pet rousos,schongoal.

HTML and VB Script Lab – U13SBE3CP

Semester : III

Skill Based Elective Course : II

Instruction Hours/Week : 2

Credit : 2

HTML Lab

1. (a) Creation of Vertical Frameset
(b) Creation of Horizontal Frameset
2. Sending Mail
3. Insertion of Image
4. Application form Creation
5. Creating an Advertisement for a Company

VB Script Lab

1. Scripts Using Date and Time Functions

- (a) Display date and time
- (b) Display the Days
- (c) Display the months
- (d) Display the current month and day

2. Scripts using Date and Time Functions

- (a) Countdown to year 3000
- (b) Add a time interval to a date
- (c) Format date and time
- (d) Is this a date

3. Scripts using Built – in Functions

- (a) Uppercase or lowercase Characters
- (b) Remove leading or trailing spaces from a String
- (c) Reverse a String
- (d) Round a number

4. Scripts using Built – in Functions

- (a) Return a random number
- (b) Return a random number between 0 – 99
- (c) Return a specified number of characters from left or right side of a String
- (d) Replacing some characters in a String

5. Checking Validation of a Textbox

ENVIRONMENTAL STUDIES - U13ES

Semester : II

Environmental Studies Course

Instruction Hours/Week: 2

Credit: 2

Unit 1 :

Environment and Natural Resources :

Definition, scope, importance of Environmental Studies - Need for public awareness. Natural resources — classification - Associated problems

a) Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forest and tribal people.

b) Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.

c) Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.

d) Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.

e) Energy resources: Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources. Case studies.

f) Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification.

- Role of an individual in conservation of natural resources.
- Equitable use of resources for sustainable lifestyles.

Unit 2: Ecosystems

- Concept of an ecosystem.
- Structure and function of an ecosystem.
- Producers, consumers and decomposers.
- Energy flow in the ecosystem.
- Ecological succession.
- Food chains, food webs and ecological pyramids.
- Introduction, types, characteristic features, structure and function of the following ecosystem:
 - a. Forest ecosystem
 - b. Grassland ecosystem
 - c. Desert ecosystem
 - d. Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

Unit 3: Biodiversity and its conservation

- Introduction — Definition : genetic, species and ecosystem diversity.
- Biogeographical classification of India
- Value of biodiversity : consumptive use, productive use, social, ethical, aesthetic and option values
- Biodiversity at global, National and local levels.
- India as a mega-diversity nation
- Hot-spots of biodiversity.
- Threats to biodiversity : habitat loss, poaching of wildlife, man-wildlife conflicts.
- Endangered and endemic species of India
- Conservation of biodiversity In-situ and Ex-situ conservation of biodiversity.

Unit 4: Environmental Pollution

Definition

- Cause, effects and control measures of
 - a. Air pollution
 - b. Water pollution
 - c. Soil pollution
 - d. Marine pollution
 - e. Noise pollution
 - f. Thermal pollution
 - g. Nuclear hazards
- Solid waste Management : Causes, effects and control measures of urban and industrial

wastes.

- Role of an individual in prevention of pollution.
- Pollution case studies.
- Disaster management floods, earthquake, cyclone and landslides.

Unit 5 : Social Issues and the Environment

- From Unsustainable to Sustainable development
- Urban problems related to energy
- Water conservation, rain water harvesting, watershed management
- Resettlement and rehabilitation of people; its problems and concerns. Case Studies
- Environmental ethics : Issues and possible solutions.
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case Studies.
- Wasteland reclamation.
- Consumerism and waste products.
- Environment Protection Act.
- Air (Prevention and Control of Pollution) Act.
- Water (Prevention and control of Pollution) Act
- Wildlife Protection Act
- Forest Conservation Act
- Issues involved in enforcement of environmental legislation.
- Public awareness.

REFERENCE

- a) Agarwal, K.C. 2001 Environmental Biology, Nidi Pubi. Ltd. Bikaner.
- b) Sharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad — 380 013,. India, Email:mapin@icenet.net (R)
- c) Brunner R.C., 1989, Hazardous Waste Incineration, McGraw Hill Inc. 480p
- d) Clark R.S., Marine Pollution, Clanderson Press Oxford (TB)
- e) Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopedia, Jaico Publ. House, Mumabai, 1196p
- f) De A.K., Environmental Chemistry, Wiley Eastern Ltd.
- g) Down to Earth, Centre for Science and Environment (R)
- h) Gleick, H.P. 1993. Water in crisis, Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute Oxford Univ. Press. 473p
- i) Hawkins R.E., Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay (R)
- j) Heywood, V.H & Waston, R.T. 1995. Global Biodiversity Assessment. Cambridge Univ. Press 1140p.
- k) Jadhav, H & Bhosale, V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284 p.
- l) Mckinney, M.L. & School, R.M. 1996. Environmental Science systems & Solutions, Web enhanced edition. 639p.

m) Mhaskar A.K., Matter Hazardous, Techno-Science Publication (TB)
 n) Miller T.G. Jr. Environmental Science, Wadsworth Publishing Co. (TB)
 o) Odum, E.P. 1971. Fundamentals of Ecology. W.B. Saunders Co. USA, 574p
 p) Rao M N. & Datta, A.K. 1987. Waste Water treatment. Oxford & IBH Pubi. Co. Pvt. Ltd. 345p. q)
 Sharma B.K., 2001. Environmental Chemistry. Geol Pubi. House, Meerut
 r) Survey of the Environment, The Hindu (M)
 s) Townsend C., Harper J, and Michael Begon, Essentials of Ecology, Blackwell Science (TB) t) Trivedi
 R.K., Handbook of Environmental Laws, Rules Guidelines,
 Compliances and Stadards, Vol I and II, Enviro Media (R)
 u) Trivedi R. K. and P.K. Goel, Introduction to air pollution, Techno-Science Publication (TB) v) Wanger
 K.D., 1998 Environmental Management. W.B. Saunders Co.Philadelphia, USA 499p (M) Magazine
 (R) Reference
 (TB) Textbook

VALUE EDUCATION - U13VE

Semester : V

Value Education Course

Instruction Hours/Week: 2

Credit: 2

UNIT 1: PHILOSOPHY OF LIFE

Human Life on Earth (Kural 629), Purpose of Life (Kural 46) Meaning and Philosophy of Life(Kural 131, 226) The Law of Nature (Kural 374) Glorifying All form of Life in this Universe (Kural 322, 327) – Protecting Nature /Universe (Kural 16, 20, 1038)

UNIT 2: INDIVIDUAL QUALITIES

Basic Culture (Kural 72, 431) Thought Analysis (Kural 282, 467, 666) Regulating desire (Kural 367), Guarding against anger (Kural 158, 305, 306, 314), To get rid of Anxiety (Kural 629), The Rewards of Blessing (Kural 3), Benevolence of Friendship (Kural 786), Love and Charity (Kural 76), Self – tranquility/Peace (Kural 318)

UNIT 3: SOCIAL VALUES (INDIVIDUAL AND SOCIAL WELFARE)

Family (Kural 45), Peace in Family (Kural 1025), Society (Kural 446), The Law of Life (Kural 952), Brotherhood (Kural 807) , The Pride of Womanhood (Kural 56) Five responsibilities/duties of Man : a) to himself, b) to his family, c) to his environment, d) to his society, e) to the Universe in his lives (Kural 43, 981), Thriftness (Thrift)/Economics (Kural 754), Health (Kural 298), Education (Kural 400), Governance (Kural 691), People’s responsibility/ duties of the community (Kural 37), World peace (Kural 572)

UNIT 4: MIND CULTURE

Mind Culture (Kural 457) Life and Mind - Bio - magnetism, Universal Magnetism (God – Realization and Self Realization) - Genetic Centre – Thought Action – Short term Memory – Expansiveness – Thought – Waves, Channelising the Mind, Stages - Meditation (Kural 261, 266, 270), Spiritual Value (Kural 423)

UNIT 5: TENDING PERSONAL HEALTH

Structure of the body, the three forces of the body, life body relation, natural causes and unnatural causes for diseases (Kural 941), Methods in Curing diseases (Kural 948, 949)

The Five units, simple physical exercises.

Books for Reference:

1. Philosophy of Universal Magnetism (Bio-magnetism, Universal Magnetism) The World Community Service Centre Vethatri Publications (for Unit IV)
2. Pope, G.U., Dr. Rev., Thirukkural with English Translation, Uma Publication, 156, Serfoji Nagar, Medical College Road, Thanjavur 613004 (for All Units)
3. Value Education for Health, Happiness and Harmony, The World Community Service Centre Vethatri Publications Rs 35/- (for All Units)

SOFT SKILLS - U13SS

Semester :V

Soft Skills

Instruction Hours/Week: 2

Credit: 2

Learning objective

Today's world is all about relationship, communication and presenting oneself, one's ideas and the company in the most positive and impactful way. This course intends to enable students to achieve excellence in both personal and professional life.

Unit I

Know Thyself / Understanding Self

Introduction to soft skills self discovery – Developing positive attitude – Improving perceptions – Forming values.

Unit II

Interpersonal Skills/ Understanding Others

Developing interpersonal relationship –Team building –group dynamics –Net working- Improved work relationship

Unit III

Communication Skills/ Communication with others

Art of Listening –Art of reading –Art of speaking –Art of writing –Art of writing emails-e mail etiquette

Unit IV

Corporate Skills/ Working with Others

Developing body language –Practising etiquette and mannerism – Time management – Stress management.

Unit V

Selling Self/ Job Hunting

Writing resume /cv-interview skills – Group discussion –Mock interview Mock GD –Goal setting –Career planning

TEXT BOOKS

Meena. K and V.Ayothi (2013) A Book on Development of Soft Skills (Soft Skills: A Road Map to Success) P.R. Publishers & Distributors, No, B-20 &21, V.M.M Complex, Chatiram Bus Stand, Tiruchirapalli -2.

(Phone No: 0431-2702824: Mobile No: 94433 70597, 98430 7442)

Alex K. (2012) Soft Skills – Know Yourself & Know the World, S.Chand & Company LTD, Ram Nagar, New Delhi -110 055.

Mobile No: 94425 14814(Dr.K.Alex)

REFERENCE BOOKS

- (i) Developing the leader within you John C Maxwell
- (ii) Good to Great by Jim Collins
- (iii) The Seven habits of highly effective people Stephen Covey
- (iv) Emotional Intelligence Daniel Goleman
- (v) You can Win Shive Khera
- (vi) Principle centred leadership Stephen Covey

GENDER STUDIES - U13GS

Semester :VI **Gender Studies Course**
Instruction Hours/Week:1 **Credit: 1**

Objectives

- To make boys and girls aware of each other strengths and weakness
- To develop sensitivity towards both genders in order to lead an ethically enriched life.
- To promote attitudinal change towards a gender balanced ambience and Women empowerment

Unit-I

Concepts of Gender: Sex-Gender-Biological Determinism- Patriarchy- Feminism -Gender Discrimination -Gender Division of Labour -Gender Stereotyping-Gender Sensitivity - Gender Equity — Equality-Gender Mainstreaming Empowerment

Unit-II

Women’s Studies Vs Gender Studies: UGC’s Guidelines - VII to XI Plans- Gender Studies: Beijing Conference and CEDAW-Exclusiveness and Inclusiveness.

Unit III

Areas of Gender Discrimination: Family Sex Ratio-Literacy -Health -Governance Religion Work Vs Employment- Market - Media - Politics Law Domestic Violence — Sexual Harassment — State Policies and Planning

Unit-IV

Women Development and Gender Empowerment: Initiatives International Women’s Decade - International Women’s Year - National Policy for Empowerment of Women - Women Empowerment Year 2001- Mainstreaming Global Policies.

Unit-V

Women’s Movements and Safeguarding Mechanism:— In India National / State Commission for Women (NCW) - All Women Police Station Family Court- Domestic Violence Act - Prevention of Sexual Harassment at Work Place Supreme Court Guidelines - Maternity Benefit Act - PNDT Act - Hindu Succession Act 2003 Eve Teasing Prevention Act - Self Help Groups 73 and 74 Amendment for PRIS.

References

Bhasin Kamala, Understanding Gender: Gender Basics, New Delhi: Women Unlimited 2004

Bhasin Kamala, Exploring Masculinity: Gender Basics, NewDelhi: WomenUnlimited, 2004
Bhasin Kamala, What is Patriarchy? : Gender Basics, New Delhi: Women Unlimited, 1993
Pernau Margrit Ahmad Imtiaz, Reifeld Hermut (ed.) Family and Gender: Changing Values in Germany and India, New Delhi: Sage Publications, 2003
Agarwal Bina, Humphries Jane and Robeyns Ingrid (ed.)Capabilities, Freedom, and Equality: Amartya Sen's Work from a Gender Perspective, New Delhi: Oxford University Press, 2006
Rajadurai.S.V, Geetha.V, Themes in Caste Gender and Religion, Tiruchirappalli: Bharathidasan University, 2007
Misra Geetanjali, Chandiramani Radhika (ed.) Sexuality, Gender and Rights: Exploring Theory and Practice in South and Southeast Asia, New Delhi: Sage Publication, 2005
Rao Anupama (ed.) Gender &Caste: Issues in Contemporary Indian Feminism, New Delhi: Kali for Women, 2003
Saha Chandana, Gender Equity and Gender Equality: Study of Girl Child in Rajasthan, Jaipur: Rawat Publications, 2003
Krishna Sumi,(ed.) Livelihood and Gender Equity in Community Resource Management New Delhi: Sage Publication, 2004
Wharton .S Amy, The Sociology of Gender: An Introduction to Theory and Research, USA: Blackwell Publishing, 2005.
Mohanty Manoranjan (ed.) Class, Caste, Gender: Readings in Indian Government and Politics- 5, New Delhi: Sage Publications,2004.
Arya Sadhna, Women, Gender Equality and the State, NewDelhi: Deep&Deep Publications,2000.
