

PART-I-TAMIL

Kjyhk; Mz;L - Kjy; gUtk;

ghlf;FwpaPl;L vz;:711T

nghJj;jkpo; jhs; - 1 - jw;fhyf; ftpijAk; ciueilAk;

myF 1

m. kuGf; ftpij

- | | | |
|-------------------|---|---------------------------------------|
| 1. ghujp | - | epyhTk; thd;kPDk; fhw;Wk; (KOikAk;) |
| 2. ghujpjhrd; | - | NjhoNd! cd;dplk; nrhy;Ntd;! |
| 3. ehkf;fy; ftpQH | - | cyfk; tho;f! |
| 4. [Pthde;jk; | - | Nfhhbf;fhy; g+jklh |
| 5. Kbaurd; | - | jiyik tfpg;Nghk; (ghLq;Fapy;> g.8) |
| 6. fz;zjhrd; | - | GjpaNjhH cyF nra;Nthk; (VohtJ njhFjp) |

M. GJf;ftpj

- | | | |
|--------------------------|---|--------------------------------------------------------------|
| 7. K.Nkj;jh | - | Njrg;gpjhtpw;F xU njUg; ghlfddpd; mQ;ryp
(fz;zPH g+f;fs;) |
| 8. ftpf;Nfh mg;Jy;uFkhd; | - | khDlj;jpd; kFlhgpN\fk; (ghy;tPjp) |
| 9. kPuh | - | fhjy; vd;d fj;jpupf;fhah? (Crpfs;) |
| 10. ituKj;J | - | kuq;fisg; ghLNtd; (,e;jg; g+f;fs;
tpw;gidf;F my;y) |

myF 2

1. vz;zq;fs; - vk;.v];.cja%Hj;jp.

myF 3 ,yf;fzk;

vOj;jpyf;fzk;> vz;> ngaH> Kiw> gpwg;G> tbtK;> khj;jpiu> nkhop Kjy; vOj;Jf;fs;> nkhop ,Wjp vOj;Jf;fs;> ,ilepiy nkak;;kaf;fk;> nkhop> gFgj cWg;G> tlnkhop vOj;J> (M.rptypq;fdhH> jkpo; ,yf;fz czHTfs;> gf;fk; 26 Kjy; 69 tiu> fgpyd; gjpg;gfk;> GJr;Nrhp)

myF 4 ,yf;fpa tuyhW

myF 1> myF 2y; cs;s ghk; njhlHghd ,yf;fpa tiffs; njhlHghd ,yf;fpa tuyhW.

myF 5 gilg;ghw;wy;

nghJf;fl;Liu gilj;jy;.



PART - II – ENGLISH**I YEAR – I SEMESTER
COURSE CODE: 712E****COURSE – I - ENGLISH FOR ENRICHMENT – I****Texts Prescribed**

1. Gate Way to English – *An Anthology of Prose and Poetry* Ed. By the Board of Editors, Harrows Publications, Chennai.
2. Modern English – *A Book of Grammar Usage and Composition* by N.Krishnaswamy, Macmillan Publishers.

Unit I**Prose**

1. Education for New India – C.Rajagopalachari.
2. All about a Dog – A.G.Gardiner
3. I have a Dream – Martin Lutherking

Unit II**Prose**

1. How I Became a Public Speaker – G.B. Shaw
2. With the Photographer – Stephen Leacock
3. Early Influences: Dr. APJ. Abdul Kalam

Unit III**Poetry**

1. Gitanjali (Songs : 1-2) Rabindranath Tagore
2. Shall I Compare thee to a Summer's Day(Sonnet 18)–William Shakespeare
3. On his Blindness – John Milton.

Unit IV**Grammar**

Noun, Pronoun, Verb, Adverb

Unit V Composition

Informal Letter, Comprehension, Dialogue Writing, Hints Developing



PART IV (I) – (C)

General Subject

NON – MAJOR ELECTIVE – COURSE – I**I YEAR – I SEMESTER
COURSE CODE: 7NME1C****COURSE 1 – COMMUNICATIVE ENGLISH****Credits : 2****Hrs / Week : 2****Objective**

To enable each learner at the college level to communicate effectively in English both in the spoken and in the written mode

Theory

Practice oriented course. Hence, 75:25 scheme of marking has to be followed. 75 marks for external assessment. 25 marks for internal marks assessment. Internal assessment will be carried out by the teacher who teaches the course while the external evaluation will be done by a group of 2 or 3 teachers who teach the course from the same college or from the nearby colleges.

Unit I BASICS OF ENGLISH

Sentence- Clause-Phrase-Word-Morpheme. Introduction to sounds of English-stress-intonations

Unit II INTRODUCTION TO LSRW SKILLS

Listening –Reading-Speaking-Writing skills

Unit III SPOKEN COMMUNICATION

Participating in Conversation
Preparation of Speech for shorter or longer duration

Unit IV WRITTEN COMMUNICATION-I

Note-Making-Summarizing-Paraphrasing-letter writing

Unit V WRITTEN COMMUNICATION-II

Introduction to preparing curriculum vitae-Creating and verifying personal and official e-mail-Preparing notice circulars, memos and agenda for a meeting-Report writing-Common errors in English Translation.



ACTIVITIES

1. Arrange the conversation between the students.
2. Preparing the speeches (for example, introducing a speaker or proposing a vote of thanks at the college function, explaining an experiment & etc.,)
3. Passage for note making
4. Passage for summarizing
5. Writing a paragraph on any topic(Statements and proverbs can be given)
6. Writing a C.V.
7. Writing a memo/notice/agenda/email/report
8. Ten sentences form Tamil to English & English to Tamil
9. Ten Sentences from error correction.

RECOMMENDED BOOKS

1. “Success with Spoken English II” Dr. Saraswathi and Dr. Noorjahan kother adham (2000), Common Wealth University books, Chennai.
2. “Teaching Spoken English and Communication Skills” Rev.Dr.Francis Soundararaj (1995), T.R.Publication, Chennai.
3. “Developing Communication Skills,” Krishna Mohan and Meera Benerji (2002) Macmillan India Limited.
4. 3 volumes – vowels
– Consonants
– Rhythm and Intonation prepared by Ciefc and published by Oxford University Press, Chennai.



**I YEAR – I SEMESTER
COURSE CODE: 9VSD1G1**

LIFE COPING SKILLS – BASIC

Credits : 4

Hrs / Week : 3

OBJECTIVES

- To understand life skills, its concept, process and practices.
- To develop the competence in application of life skills for effective learning and planning for career.
- To provide orientation in Life Coping Skills

UNIT-I: Self –Concept, Self Acceptance and Personality Development (12)

Concept and definition of Self-Esteem, Factors influence Self-Esteem, Low Vs High Self-Esteem, Step to raise Self Esteem, Definition of Self of Self Concept, Characteristics of the Self-Concept, Introduction, Definition and Theoretical perspective of self-Acceptance, Benefits of Self-Acceptance, Characteristics and Elements of Personality and Identity of the Individual.

UNIT-II : Positive Thinking, Motivation and Self Actualization (12)

Positive Thinking and Positive Attitude, The power of positive thinking, positive imaging, Concept and Theories of Motivation and Self-Actualization and Factors of Motivation.

UNIT-III : Goal Setting (12)

Definition of Goal Setting, Different types of Goals, Importance of Goal setting, Obstacles to set Goals and Steps to Goal Setting.

UNIT-IV : Coping Skills: Depression, Fear, Anger and Failure (12)

Definition, Symptoms, Causes and Impact of Depression, How to overcome Depression, Theoretical Input of Fear, Kinds of Fear, Coping with Fear, Ways to overcome Fear, Consequence of Anger, Managing Anger, Steps toward Anger Management, Positive Attitude towards Failure, Coping with Failure.

UNIT-V : Leadership (12)

Emergence and Functions of Leader, Characteristics of Leadership, Attributes of Leadership, Types of Leadership, Characteristics of Successful Leadership

BOOK(S) FOR STUDY:

1. Xavier Alphones S.J “We Shall Overcome” A Textbook on Life Coping Skills, ICRDCE Publication Chennai, March 2004.



**I YEAR – I SEMESTER
COURSE CODE: 9VSD1C1**

Skill Subject

CORE – I – FUNDAMENTALS OF PROGRAMMING AND C

Credits : 5

Hrs / Week : 6

OBJECTIVES:

- To impart fundamental of programming skills such as Flowcharts and Algorithms
- To learn programming skills using C language and to make the students learning to use the specialities of 'C' language for programming

Unit – I

(18)

Algorithms - Flow charts – Developing algorithms and flowcharts for solving simple problems.

Unit – II

(18)

Flowcharts for sequential, selection and iterative programming structures.

Unit – III

(18)

C Fundamentals: Computer- Programming Concepts: Algorithms and Flow charts - Introduction to C Language – How to Run C Programs - Identifiers, Keywords, Constants, Variables and Data Types, Access Modifiers, Data Type Conversions- Operators- Conditional Controls - Loop Controls.

Unit – IV

(18)

Arrays: One Dimensional Array - Two Dimensional Array - Character Arrays and Strings.
Function: Introduction - Elements of User Defined Function - Definition of Functions - Return Values and their Types - Function Calls- Function Declaration - Category of Function – Nesting of Function - Recursion - Library functions.

Unit – V

(18)

Structures, Unions and Pointers: Defining Structure - Declaring Structure Variable - Accessing Structure Members - Structure Initialization - Arrays of Structure – Union. Pointers - Declaration of Pointers- Accessing Variables through Pointers- Pointer Arithmetic

BOOK(S) FOR STUDY:

1. S. Jaiswal, “Information Technology Today”, Galgoita Publications, Fourth Edition, 2009. **(Unit I, II)**
2. E. Balagurusamy, “Programming in ANSI C”, Tata McGraw Hill, New Delhi, Seventh Edition, 2016 **(Unit III, IV, V)**.

BOOK(S) FOR REFERENCE:

1. Byron S. Gottfried, “Programming with C”, Schaum’s Outline Series, Tata McGraw Hill, Fourth Edition, New Delhi, 2005.
2. Brian W. Kernighan, Dennis M. Ritchie, “The C Programming Language”, Prentice Hall of India Pvt. Ltd., New Delhi, 1989.
3. E. Karthikeyan, “A Textbook on C Fundamentals, Data Structures and Problem Solving”, Prentice-Hall of India Private Limited, New Delhi- 110001, 2008.



**I YEAR – I SEMESTER
COURSE CODE: 9VSD1P1**

CORE – II - PRACTICAL– C PROGRAMMING –LAB

Credits : 3

Hrs / Week : 4

OBJECTIVE:

- To understand the basic concept of C Programming, and its different modules that include conditional, looping expressions, Arrays, Strings and Functions.

- 1) Write a C program to add two numbers, subtract two numbers.
- 2) Write a C program to multiply 2 numbers, divide one number by other.
- 3) Write a C program to find the sum and average of given set of numbers.
- 4) Write a C program to find the factorial of a given number.
- 5) Write a C program to find the given number is Odd or Even.
- 6) Write a C program to find square root, square and cube of any number.
- 7) Write a C program to calculate Simple Interest and Compound Interest.
- 8) Write a C program to find the Area and the circumference of a circle.
- 9) Write a C program to find the area of a triangle.
- 10) Write a C program to input a temperature in Celsius and find the corresponding temperature in Fahrenheit.
Use the formula $f = (9.0 / 5.0 * C) + 32$ and $C = (5.0/9.0)*(f - 32)$
- 11) Write a C program to find Fibonacci Series.
- 12) Write a C program to Swapping (interchanging) two numbers.
- 13) Write a C program to find the Biggest / smallest of 2 numbers.
- 14) Write a C program to find the Biggest / smallest of 'n' numbers.
- 15) Write a C program that receives the data such as age and name of person to check the eligibility for voting. Take the condition that if a person is more than 18 years old he is eligible to vote. Else display the number of years, he has to wait for voting.
- 16) Write a C program to sort 10 Nos. in Ascending order/ Descending order.
- 17) Write a C program for matrix addition / subtraction.
- 18) Write a C program for matrix multiplication.
- 19) Write a C program to concatenate the two strings.
- 20) Write a C program to sort 10 NAMES in Ascending order.26) Write a C program to find a word is PALINDROME or not.

Total Hours: 90



I YEAR –I SEMESTER**SUBJECT CODE: 9VSD1P2****CORE – III - PRACTICAL - OFFICE AUTOMATION –LAB****Credits : 3****Hrs / Week : 6****OBJECTIVES**

- To impart the knowledge about the Office Automation and the features of MS-Office
- To develop the learner's skills to effective usage of Office Automation package

MS-Word

- 1) Create a document file for your Resume
- 2) Create a document file for a Leave Letter
- 3) Use of Header & Footer, Bullets & Numbering in a document
- 4) Create class Time Table using Table option in word – use different table formats
- 5) Creating Charts within word
- 6) Create mail and cover using Mail Merge feature
- 7) Create a table and do table arithmetic and sort text
- 8) Drawing a simple Flow Chart
- 9) Create a simple word macro and use it

MS-Excel

- 1) Create a spreadsheet to Calculate Student Marks Total and average
- 2) Create a spreadsheet for Tax Calculation
- 3) Use Statistical Functions in cells
- 4) Use Math Functions in cells
- 5) Use Financial Functions in cells
- 6) Create a spreadsheet for Sorting a Database
- 7) Draw Chart – use different formats

MS-PowerPoint

- 1) Design a Slide Show to explain C data types / operators and control statements.
- 2) Design a Slide Show for your College function.

MS-Access

Create a Table:

Title, Author name, Year of Publishing, Price

1. Get the details of all the books.
2. Get the details of all the books whose price is between 500 and 700.
3. Get the details of all the books whose year of Publishing is 2004.
4. Get the details of all the books whose year of Publishing is 2002 or 2005.
5. Get the details of all the books whose year of Publishing is between 2003 and 2005.

Total Hours: 90

**I YEAR – I SEMESTER
COURSE CODE: 9VSD1A1**

**ALLIED – I – PRINCIPLES OF INFORMATION AND COMMUNICATION
TECHNOLOGY**

Credits : 4

Hrs / Week : 4

Objectives

- To impart the knowledge about Information Technology policy, standards, guidelines and role in every part of life.
- To get insight knowledge about the Internet and its facilities, services, tools and Multimedia.

Unit – I (12)

Information Technology – Meaning – Need – Components Role of IT – IT in manufacturing, IT in mobile computing, IT in public sector, IT in defense, IT in media, IT in publication, IT and internet.

Unit – II (12)

Emerging Trends of Information Technology: Mobile Communication, Bluetooth, Global Positioning System (GPS), Infrared Communication, Smart Card, Blue Laser Disc, Nano Technology.

Unit – III (12)

Internet: Introduction, Relays, Repeaters, Bridges, Routers, Gateways. **Internetworking:** How networks differ, concatenated virtual circuits, connectionless internetworking, Firewalls, internet architecture.

Unit – IV (12)

Multimedia: Definition – Building blocks of multimedia – Multimedia System – Applications – Virtual Reality.

Unit – V (12)

Internet Tools: Introduction – Web Browser – Electronic Mail – Search Engines – Instant Messaging.

BOOK(S) FOR STUDY:

1. ITL Education Solution Ltd, "Introduction to Information Technology", Dorling, Kindersley (India) Pvt. Ltd, New Delhi, 2012.

BOOK(S) FOR REFERENCE:

1. Jennifer Sargunar, "Introduction to Information Technology", ITL Education Solutions Limited, Pearson Education India, Second Edition, 2012.
2. Srinivasa Vallaban SV, "Computers in Business", Sultan Chand and Sons, New Delhi, 2005.



Kjyhk; Mz;L - ,uz;lhk; gUtk;
ghlf;FwpaPl;L vz;: 721T
nghJj;jkpo; jhs; -2 ,ilf;fhy ,yf;fpaKk; rpWfijAk;

myF 1

m. jpUQhdrk;ge;jH

1. jpUthlhid - "khNjhH \$W" vdj; njhlq;Fk; ghly;.
2. jpUg;Gdthry; - "kpd;dpay; nrQ;ril" vdj; njhlq;Fk; ghly;.
3. jpUf;nfhLq;Fd;wk; - "thdpw; nghypnta;Jk;" vdj; njhlq;Fk; ghly;.

M. jpUehTf;furH

1. jpUg;Gj;J}H - "kpd;fhl;Lk;" vdj; njhlq;Fk; ghly;.
2. jpU,uhNkr;Ruk; - "ghrKk;" vdj; njhlq;Fk; Kjy; ghly;.
3. jpUg;g+tzk; - "tbNaW" vdj; njhlq;Fk; ghly;.

.. Re;juH

1. jpUf;fhdg;NgH - "njhz;lH mbj; njhoYk;" vdj; njhlq;Fk; ghly;.
2. jpUr;Ropay; - "Cdha; capH cfyha;" vdj; njhlq;Fk; ghly;.

<. khzpf;fthrfH - jpUthrfk;

1. jpUg;ngUe;Jiw - ,d;gk; ngUf;fp vdj; njhlq;Fk; ghly;.(jpUntz;gh.11)
2. jpU cj;juNfhrkq;if - ePj;jy; tpz;zg;gk;> ,Ujiyf;nfhs;sp vd;W
njhlq;Fk; ghly;.

c. jpU%yH - jpUke;jpuk;

1. md;Gk; rptKk; vdj; njhlq;Fk; ghly;.
2. vl;bg; gOj;j vdj; njhlq;Fk; ghly;.
3. glkhlf; Nfhapy; vdj; njhlq;Fk; ghly;.



C. jpUkq;if Mo;thH

jpUg;Gy;yhzp - xd;gjhk; gj;J ehyhk; jpUnkhop “fhthH kly; ngz;iz” vdj;

njhlq;Fk; xd;whk; ghly; Kjy; “tpy;yhs; ,yq;if” vdj; njhlq;Fk; le;jhk;

ghly; tiu (nkhj;jk; le;J ghly;fs;)

v. rpw;wpyf;fpak;

1. mgpuhkp me;jhj - cjp;fpd;w nrq;fjpH vdj; njhlq;Fk; Kjw;ghly; njhlq;fp
mjidj; njhlHe;J tUk; 9 ghly;fs; (Mf nkhj;jk; 10 ghly;fs;).

2. jkpo;tpL J}J - 17 Mk; fz;zp Kjy; 27 Mk; fz;zp tiu.

3. jpUf;Fw;whyf;FwtQ;rp> tre;jts;sp ge;jbj;jy;.

4. ghLthH Kj;jg;gH> nraq;nfhz;lhH rjfk; Kjy; ,U ghly;fs;.

myF 2 - rpWfij

rpWfijfs; 10 MrphpaH FO> mwpTg; gjpg;gfk;.

myF 3 - ,yf;fzk;

nrhy;ypyf;fzk;

nrhy;tif> ngaHr;nrhy;> tpidr;nrhy;>,ilr;nrhy;> chpr;nrhy;>,yf;fzk;> Ntw;Wik> kaf;fk;>
MFngaH>; (M.rptypq;fdhH> jkpo; ,yf;fz czHTfs; - fgpyd; gjpg;gfk;> GJr;Nrhp).

myF 4 - ,yf;fpa tuyhW

myF 1> myF 2y; cs;s ghk; njhlHghd ,yf;fpa tiffs; njhlHghd ,yf;fpa tuyhW.

myF 5 - gilg;ghw;wy;

rpWfij gilj;jy;.



**I YEAR – II SEMESTER
COURSE CODE: 722E****COURSE - II – ENGLISH FOR ENRICHMENT – II****Texts Prescribed**

1. Gate Way to English – *An Anthology of Prose and Poetry* Ed. by the Board of Editors, Harrows Publications, Chennai.
2. Modern English – *A Book of Grammar Usage and Composition* by N.Krishnaswamy, Macmillan Publishers.

Unit I Prose

1. My Greatest Olympic Prize – Jesse Owens
2. Voluntary Poverty – Mahatma Gandhi
3. Helen Kellar – Ishbel Ross

Unit II Prose

1. Coffee Worries – R.K. Narayan
2. A Night Among the Pines – R.L. Stevenson
3. Spoon Feeding – W.R.Inge

Unit III Poetry

1. Daffodils - Wordsworth
2. Mending Wall – Robert Frost
3. A River – A.K.Ramanujan

Unit IV Grammar

Adjective, Preposition, Conjunction and Interjection.

Unit V Composition

Formal Letters, Resume Writing, Precise Writing and General Essays.



I YEAR – II SEMESTER
COURSE CODE: 7BES2
COURSE – ENVIRONMENTAL STUDIES

Credits : 2

Hrs / Week : 2

OBJECTIVES

- To impart major concepts in Environmental sciences and to demonstrate the in-depth understanding about the living environment
- To make students to integrate human ecology and Environmental problems
- To create awareness about various pollutions and its impact on Environment

Unit I The Multidisciplinary Nature of Environmental Studies

Definition, Scope and importance
 Need for public awareness

Unit II Natural Resources

Renewable and non-renewable resources

Forest Resources: Use and over-exploitation, deforestation, case studies, Timber extraction, mining, dams and their effect on forests and tribal people

Water Resources: Use and over-Utilization of surface and ground water, floods, drought, conflicts over water, dams- benefits and problems.

Mineral resources: Use and exploitation, experimental effects of extracting and using mineral resources, case studies.

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

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

Land resources: Land as a resource, land degradation, main induced landslides, soil-erosion and desertification

Role of individual in conservation of natural resources

Equitable use of resources for sustainable lifestyle

Unit III Ecosystems, Bio-diversity and its conservation

Ecosystems

Concept of an Ecosystem

Structure and function of an Ecosystem

Energy Flow in the Ecosystem

Food Chains, Food Webs and Ecological Pyramids

Biodiversity and its conservation

Introduction- Definition: Genetic, Species and Ecosystem Diversity

Bio-Geographical 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 IV Environmental Pollution

Causes, Effects and Control measures of:-

Air Pollution - Water pollution - Soil pollution - Marine pollution - Noise pollution

Thermal pollution - Nuclear hazards

Unit V Field Work

Visit to a local area to document environmental assets—river/ forest/ grassland/ hill/ mountain

Visit to a local polluted site- Urban/Rural/Industrial/Agricultural

Study of common Plants, insects, birds

Study of simple ecosystem-pond, River, Hill slopes, etc

Books for Reference:

- Agarwal, K.C.2001 Environmental Biology, Nidi Publ.Ltd., Bikaner
- Bharucha Erach The Biodiversity of India, Mapin Publishing Pvt. Ltd, Ahamedabad-380013,India, Email: mapin@cent.net®
- Burner R.C. 1989, Hazardous Waste Inclineration McGraw Hill Inc.480p
- Clark R.S. Marine Pollution, Clanderson Press Oxford(TB)
- Cunnigham, W.P.Cooper, T.H.Gorhani, E& Hepworth, M.T 2001 Environmental Encylopedia, Jaico Publ. House, Mumbai, 1196p.
- De.A.K.Environmental Chemistry, Wiley Eastern Ltd.
- Down to Earth, Centre for Science and Environment®
- Gleick H.P. 1993, Water in crisis, Pacific Instutue for studies in Dev, Environment & Security, Stockholm Env. Institute,Oxford Univ.Press,473p
- Hawlinks R.E., Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay (R)
- Heywood, V.H & Watson, R.T.1995, global biodiversity Assesment, Cambridge Univ.Press, 114op
- Jadhav, H&Bhosale V.M.1995, Environmental Protection and Laws, Himalaya Pub; House, Delhi 284p
- Mckinney, M.L & Schoch, RM.1996 Environmental Science systems& Solutions, web enhanced edition 639p
- Mhaskar A.K.Matter Hazardous, techno-Science Publications(TB)
- Miller T.G. Jr.Environmental Science wadsworth Publicing Co(TB)
- Odurm, E.P.1971 fudamentalof Ecology, W.B.Saunders Co. USA 584p
- Rao M.N & Datta, A.K., 1987, Tehchno-Science, Waste water Treatment. Oxford& IBH publ, Co.Pvt. Ltd.,345p
- Sharma B.K. 2001, environemtal chemistry Goel publ,House,Meerut
- Survey of the Environmental the Hindu(M)
- Townsend C, harper J, and Michael Degon,Essential of ecology,Blakewell Science (TB)
- Trivedi R.K., Hand book of Environmental laws, Rules, Guidelines, compliances and Standards, Vol I and II, Enviro Meida ®
- Trivedi R.K. & P.K.Goel Introduction to Air pollution,Techno-Science Publications (TB)
- Wanger K.D, 1998 Environmental Management W.B. Environmental Management. W.B.Saunders Co. Philadelphia, USA.499p



I YEAR – II SEMESTER
SUBJECT CODE: 9VSD2G1
LIFE COPING SKILLS – ADVANCED

Credits : 4

Hrs / Week : 4

OBJECTIVES

- To make the students to manage stress and time effectively.
- To enable the students to become a good team player so as to make them to acquire problem solving skills, creative and critical thinking abilities to develop decisions, and building healthy relationships with their team-mates.
- To impart Life Coping skills to the learners to face the challenges of the new millennium, ruled by globalization and market forces.

UNIT -I: Meaning and Attitude to Success (12)

Meaning and Definition of Success-Obstacles to Success- The winning Edge –Struggle-Overcoming obstacles-Measuring Success-Qualities that make a person successful-A Recipe for Success-Guidelines to Measure True Success.

UNIT -II: Problem Solving and Decision Making (12)

Meaning of Problem Solving- Ways to solve problems-Principles for managing problems positively. Meaning of Decision Making- Decision making process-The Five Cs of decision making.

UNIT –III: Time management and Stress Management (12)

Meaning and Importance of Time Management-Time factor-Steps for Avoiding Lateness Problems-Tips for time management. Meaning and Kinds of Stress -Types of Stress-How does Stress affect you- Source of Stress-Responses to Stress -Good, Bad and Ugly forms of Stress-How to manage stress-Commandments for Managing Stress.

UNIT –IV: Coping with Criticism and Conflict (12)

Definition of Criticism- Beliefs about Criticism-Types of Criticism-Response to Criticism- Coping with Criticism-Self Criticism-Giving Criticism to others-Receiving Criticism-Negative Assertion- Fogging- Negative Enquiry. Meaning of Conflict-Constructive or destructive- Constructive nature of Conflicts-Strategies for Managing Conflicts- Tactics of Conflict Management.

Unit –V: Team Work (12)

Meaning of Team Work-Needed qualities for working as a Team-Team Learning: Questioning. Valuing Diversity- Communicating-Learning Review.

BOOK(S) FOR STUDY:

1. Alphonse Xavier S.J “We Shall Overcome” A Textbook on Life Coping Skills, ICRDCE Publication Chennai, March 2004.



I YEAR –II SEMESTER
COURSE CODE: 9VSD2C1
CORE IV - WEB TECHNOLOGY

Skill Subject

Credits : 4

Hrs / Week : 6

OBJECTIVES

- To impart the fundamentals of Inter-networking and its protocols
- To understand the various steps in designing a creative and dynamic website using html, JavaScript and XML.

UNIT I:**(18)**

Internetworking Concepts , Devices , Basics , History and Architecture – TCP/IP– The Concept of IP Address – Address Resolution Protocol (ARP) – Reverse AddressResolution Protocol (RARP) – Internet Control Message Protocol (ICMP).

UNIT II :**(18)**

Domain Name System (DNS) – Electronic Mail (EMAIL) – File TransferProtocol (FTP) – Trivial File Transfer Protocol (TFTP) – A Brief History of WWW – TELNET Remote Login – Web Browser – An Introduction to Electronic Commerce.

UNIT III:**(18)**

Introduction to HTML: Markup Languages-editing HTML-common tags-header-text styling-linking-images-formatting text-special characters, horizontal rulers and line breaks-unordered list –nested and ordered list –tables and formatting-forms-linking-frames.

UNIT IV:**(18)**

JavaScript: Introduction - **Control Structures** : Selection Structure: If structure –While structure – assignment operators – increment / decrement operators - for structure – switch structure – Do...While structure – break and continue statements - Logical operators.

UNIT V:**(18)**

JavaScript events: Registering Event handlers – event OnClick and onload – Event onmousemove and onmouseout – onfocus and onblur. **XML:** Introduction – Structuring data – XML namespace – Document Type Definition (DTD)

BOOK(S) FOR STUDY:

1. Achyut S Godbole , Atul Kahate – “ Web Technologies TCP/IP to Internet Application Architecture .” – Tata McGrawhill, 2002. **(Unit I, II)**
2. H.M.Deitel, P.J.Deital, T.R.Neito, - “Internet and World wide web - How to Program”, - Pearson Education Asia-Addison Wesley Longman pvt Ltd, Fifth Edition, 2012. **(Unit III, IV, V)**

BOOK(S) FOR REFERENCE:

1. N.P. Gopalan, J. Akilandeswari, - “Web Technology – A Developer’s Perspective”, - PHI Learning Private Limited, New Delhi, Second Edition 2014.



I YEAR –II SEMESTER
COURSE CODE: 9VSD2P1
CORE – V – WEB DESIGNING –LAB

Credits : 5

Hrs / Week : 6

OBJECTIVES

- To learn the languages for the web such as, HTML, JavaScript, Photoshop, Flash and Dreamweaver
- To develop interactive website creation skills and make the students to analyse the usability of a web site.

HTML:

1. Design and format the contents of a webpage using basic tags.
2. Design a HTML page describing your profile using list items.
3. Design three HTML pages to describe about courses offered in 'Alagappa Institute of Skill Development' and navigate among them.
4. Design an application form for opening a SB account using 'form' tag.
5. Design a webpage using Frame tag.
6. Create a webpage and link image, audio and video files.

JavaScript:

7. Write a simple JavaScript with Conditional and Branching constructs
8. Find a maximum of three given numbers using JavaScript
9. Count the number of vowels in a string using JavaScript
10. Write a JavaScript to perform all arithmetic operations
11. Write a JavaScript to check whether the given number is prime or not
12. Write a JavaScript to illustrate built-in string functions.
13. Validate user name and password using JavaScript
14. Validate the details of SB Account form using JavaScript.
15. Create popup boxes using java script

Photoshop

16. Design a Student ID card using Photoshop
17. Design an Invitation using Photoshop
18. Using Photoshop design Flexible Banners
19. Design a Web Page layout using slice tool using Photoshop

Flash

20. Develop an image with the help of basic shapes in Flash
21. Animate an image using motion, shape tweening, and actions using Flash
22. Design an animation to bounce a ball using Flash.

Dreamweaver

23. Develop a web page class timetable using Dreamweaver.
24. Develop a College student application form using Dreamweaver.
25. Design a web blog of personal details using Dreamweaver

Total Hours: 90

**I YEAR –II SEMESTER
COURSE CODE: 9VSD2P2****CORE – VI – DTP AND MULTIMEDIA LAB****Credits : 4****Hrs / Week : 4****OBJECTIVES**

To make the students:

- Identify components of desktop publishing, such as text, graphics, and different page layout
- It imparts the techniques the multimedia so that the students will come across to produce an appropriate design.
- To Manage images appropriately and Demonstrate design and animation concepts

Photoshop

- Introduction to Photoshop
- Learn Photoshop various Tools
- Design a Student ID card using Photoshop
- Design an Invitation using Photoshop
- Using Photoshop design Flexible Banners
- Design a Web Page layout using slice tool using Photoshop
- Design a Black and White photo into Colored photo
- Apply Text Effect in Various Text Using Photoshop

Flash

- Introduction to Flash interface and Tools
- Working with Layers in Flash
- Making basic Animation with Tweens
- Develop an image with the help of basic shapes in Flash
- Animate an image using motion, shape tweening, and actions using Flash
- Design an animation to bounce a ball using Flash.
- Masking in Flash



I YEAR –II SEMESTER
COURSE CODE: 9VSD2A1

Skill Subject

ALLIED-II – MATHEMATICS - OPTIMIZATION TECHNIQUES

Credits : 4

Hrs / Week : 4

OBJECTIVES

- To introduce the various Optimization techniques and their usages.
- To enable the students to effectively solve the Resource Management problems using Optimization techniques.

UNIT-I

(12)

Optimization Techniques: Introduction - Definition – Advantages – Limitations – Applications. **Linear programming:** Definition - Central Problem of linear Programming various definitions included Statements of basic theorem and also their properties, simplex methods, primal and dual simplex method: Definition – rules involved in solving by simplex method - Algorithm – Problem solving.

UNIT-II

(12)

Transport problem: Definition – Algorithm – Problem solving, tic-tac problem: Definition – Algorithm – Problem solving and its solution. **Assignment problem:** Definition – Algorithm – Problem solving and its solution. **Graphical Method Formulation:** Definition – steps involved in Graphical Method Formulation – problem solving. **Linear Programming Problem -** steps involved in solving Linear Programming Problem – Problem solving.

UNIT-III

(12)

Queuing Theory

Characteristics of queuing system, Classification of Queuing Model Single Channel Queuing Theory, Generalization of steady state M/M/1 queuing models(Model-I, Model-II).

UNIT-IV

PERT & CPM

(12)

Basic differences between PERT and CPM.-Arrow Networks, time estimates, Earliest expected time -Latest – allowable occurrences time -Forward Pass Computation Backward Pass Computation- Representation in Tabular Form - Critical Path - Probability of meeting scheduled date of completion, Calculation on CPM network- Various floats for activities.

UNIT-V

Job Sequencing

(12)

Introduction, solution of sequencing problem Johnson’s algorithm for ‘n’ jobs through machines

BOOK(S) FOR STUDY:

1. P.K. Gupta and D.S. Hira, Aarti Kamboj, “Introduction to Operations Research”, S.Chand & Co, First Edition, 2012.

BOOK(S) FOR REFERENCE:

1. J.K. Sharma, “Operations Research: Theory and Applications”, Mac Millan, Third Edition, 2006.
2. S.D. Sharma, “Operations Research”, Kedar Nath Ram Nath, Meerut (UP), Fourth Edition, 2009 .
3. S.S. Rao “Optimization Theory and Application”, Wesley Eastern, Fourth Edition, 2009.



II YEAR- III -SEMESTER
SUBJECT CODE: 9VSD3G1
ADVANCED COMMUNICATIVE ENGLISH

Credits : 4

Hrs / Week : 4

OBJECTIVES

- To read and to evaluate different genres of Communicative English with an understanding of its purposes
- To study the different techniques used to exhibit the effective Communicative skills and presentation skills

Unit – I (12)

Basis of Communication: Meaning, Importance and process, Need and objectives of communication, 7c's of Communication, Barriers of communication, How to overcome communication Barrier.

Unit – II (12)

Means/Media of Communication: Verbal and non-verbal communication channel of communication formal & informal communication. Types of communication – Downward, upward, Horizontal or lateral, Diagonal or cross.

Unit – III (12)

Listening as a Communication Tool: Importance types of listening, Barriers to effective listening – How to make listening effective. Speeches and Presentation - Speeches - Characteristics of a good speed, How to make speech effective - Presentation - Planning, preparation, organizing, rehearsing and delivery.

Unit – IV (12)

Groups: Importance of features, Advantages and Disadvantages techniques of Group decision making - Brain storming sessions, Nominal Group Technique, solving problems in Groups.

Unit – V (12)

Presentation Skills: Group discussion, mock group discussion using video recording- public speaking.

BOOK(S) FOR REFERENCE:

1. Bhatia.R.C., Business Communication.
2. Madhukar.R.K, Business Communication.
3. Shraf Ravi.A, Effective Technical Communication.

Note: This paper is a practice oriented course. The assessment for 100 marks will be carried out by the faculty who teaches the course and an external examiner by conducting Group Discussions and brain storming sessions.



**II YEAR- III-SEMESTER
SUBJECT CODE: 9VSD3G2**

General Subject

PROFESSIONAL ETIQUETTES

Credits : 2

Hrs / Week : 2

OBJECTIVES

- To impart appropriate workplace etiquettes, dress code and use of facilities in business environment.
- To gain knowledge regarding the dinning, travel etiquettes and hospitality.

Unit I:

(6)

Why Business Etiquette, Greeting and Introduction: who to introduce first, Guidelines for Determining Importance, A few tips, Shaking Hands, Use of Names, Business Card, Remembering Names,

Unit II:

(6)

The well Groomed Man: Hair, Face, Hands, Personal Hygiene, formal dress code, Shirts and Trousers, Business Suits, Ties, Shoes, Belt, Socks, Handkerchief, wallet, Jewellery, Eyeglasses, Fragrance, Business Casuals. The well Groomed Women: Hair, Personal Hygiene, Make up, Hand and Nails, Feet, Shoes, Jewellery, Formal Dress code, Indian Dressing, Western Dressing, Accessories, Business Casuals.

Unit III:

(6)

Workplace Etiquette: Behavior, Body Language, Everyday Courtesies, Use of office Machine Etiquette, Using Facilities, Washroom Etiquette, Holding Doors, Elevator Etiquette, Managing Conflict, Visiting Other Offices, Receiving Visitors in Your Offices, Telephone Etiquette, Cell Phone Etiquette, Meeting Etiquette

Unit IV:

(6)

Dining Etiquette: Rationale for a Dining Etiquette, Table Setting, Napkin Use, Cutlery Awareness, Eating Consideration, Eating Soup, Breaking Bread, Managing Difficult Food, Specific Dishes, Avoiding Elementary Dining Mistakes, Knowing Wines

Unit V:

(6)

Restaurant Etiquette: Reservation, Ordering, Problems, Paying Bills and Tipping, Buffet Dining Etiquette. Office Party Etiquette: some Consideration, when is a Person a Bad Guest. Travel Etiquette: Airplane Travel, Hotel Stay. Cross-Cultural Consideration: Awareness, Cultural Sensitivities of some Countries, Giving Gifts. Email Etiquettes.

BOOK(S) FOR STUDY:

- Sarvesh Gulati “Corporate Grooming and Etiquette”, Rupa Publications India Pvt. Ltd., New Delhi, 2010

Total Hours: 30



PART IV (2) – SKILL BASED SUBJECTS (SBS)**GROUP I – SET I****II YEAR – III SEMESTER****COURSE CODE: 7SBS3A1****COURSE I – COMPETITIVE EXAMINATION SKILLS****Credits : 2****Hrs / Week : 2****Objectives:**

- To build a sense of awareness among students through proper guidance about various competitive examinations in order to motivate students for prospective career in government and corporate sector.
- To intensively guide students for competitive examinations like TNPSC, UPSC, SSC, RRB, IBPS etc.

Unit I

Public Service Commission: Tamil Nadu Public Service Commission (TNPSC) and its role - History of TNPSC - Constitutional Provisions on the Formation, Functions, and Powers of Public Service Commissions for the Union and for the States - TNPSC and its rules of Procedure.

Eligibility and examination pattern: TNPSC - Union Public Service Commission (UPSC) - Staff Selection Commission (SSC) - Railway Recruitment Board (RRB) – Institute of Banking Personnel Selection (IBPS).

Unit II

Intelligence, creativity & application, testing & assessment - Types, verbal abilities & fluency

Unit III

Numerical ability:

Numbers, simplification, time and work, percentage, fraction, speed and distance, simple and compound interest, ratio and proportion

Unit IV

Spatial and perceptual abilities, situation reaction test

Unit V

Memory and inductive reasoning, Logical reasoning, Coding and Decoding, Direction Test, Syllogism

Books for Reference:

1. Ajay rai, “intelligence tests”, sterling paperbacks, published by sterling publishers pvt. Ltd., 1-10, green park extension, new delhi 110 016., 2001
2. Competition success review magazines.



PART IV (I) – (C)

NON – MAJOR ELECTIVE – COURSE II

II YEAR – III SEMESTER

COURSE CODE: 7NME3C

COURSE II – EFFECTIVE EMPLOYABILITY SKILLS

Credits : 2

Hrs / Week : 2

Unit I Curriculum Vitae & Facing the Interview

Applying for jobs, Preparing the curriculum Different formats vita, Facing the interviews, Frequently Asked Questions (FAQs).

Unit II Interpersonal Communication

One to one Communication
One to group Communication

Unit III Group Discussion

Listening, Ice-breaking, Leader – Member Moderates his role responsibility, Conflict, Management, Consensus, Steps involved

Unit IV Team Work

Qualities Selection constant & comfort, Orientation Review Tea, Review of the team work

Unit V Motivation

Leadership & Motivation, Behaviour, Motives Managerial Skills

Books for Reference:

1. E.H.McGrath, S.J., “Basic Managerial Skills For All”, Prentice-Hall of India Private Limited, New Delhi 110 001. ISBN-0-87692-498-4.
2. D.K.Sarma, “You & Your Career”, Wheeler Publishing, 755, Anna Salai, Chennai 600002. ISBN 81-7544-170-4. -1999
3. Indian Jaycees, “Skills” Series, published by Indian Jaycees.
4. S.P.Sachdeva, “Interview In A Nutshell”, Sudha Publications (P) Ltd., B-5, Prabhat Kiran, Rajendra Place, New Delhi 110 008.



PART V**II YEAR – III SEMESTER
COURSE CODE: 7BEA3****PART – V – EXTENSION ACTIVITIES****Credits : 1****Hrs / Week : --**

Extension Activities will be organized for 2 days in the Third Semester. The programme may be organized in any Saturday and Sunday.

A meeting of all the staff of the College (Teaching, Administrative and Technical Staff) be conducted before departing to the camp in which each and every aspect like Programmes to carried out, accommodation, food, medical aid, transport facilities, etc., should be thoroughly discussed.

One credit will be allotted for this Extension Activities. The marks allotted for each camp will be 100. Each student participating in the camp will be evaluated internally for 100 marks. The criteria for evaluation of Extension Activities will be as follows:

S. No.	Criteria	Maximum Marks
1.	Interaction with villagers	10
2.	Participation / Attitude towards work	10
3.	Participation in interaction and discussion	10
4.	Knowledge of problems / issues	10
5.	Organising & decision making ability	20
6.	Expression: a) Cultural programmes	10
	b) Report Writing	20
7.	Ability to adjust and work in a team	10
Total		100



II YEAR – III SEMESTER
SUBJECT CODE: 9VSD3C1
CORE – VII – OPERATING SYSTEMS

Credits : 5

Hrs / Week : 5

OBJECTIVES

- To impart the basic principles of Operating System and its services
- To present fundamental aspects of various Process, Memory management, GUI and Security techniques of Operating System along with an introduction of UNIX.

UNIT-I**(15)**

Introduction to Operating System: Definition of Operating System- Booting – Kernel History of Operating system - Operating system functions – File system.

UNIT-II**(15)**

Process Management and Deadlock: Process Management - Inter-process communication - Dead Lock - Dead Lock prerequisites - Dead Lock Strategies

UNIT-III**(15)**

Memory Management: Memory Management - Single Contiguous – Fixed Partitioned – Variable Partitions – Non-Contiguous allocations - Paging – Segmentation - Virtual Memory Management Systems.

UNIT-IV**(15)**

GUI and Security: GUI – Components of GUI – Requirements of Windows based GUI – Security Protection: Threats – Attacks – Worms – Virus - Design principles – Authentication – Protection mechanisms – Encryption.

UNIT-V**(15)**

UNIX: Unix-Architecture of Unix-File System of Unix- Basic commands in UNIX.

BOOK(S) FOR STUDY:

1. Achyut S. Godbole and Atul Kahate, “Operation Systems”, Third Edition, Tata McGraw Hill, 2011.

BOOK(S) FOR REFERENCE:

1. Abraham Silberschatz, Peter Baer Galvin “Operating System Concepts”, Sixth Edition, John Wiley & Sons Inc., New Delhi, 2003.
2. Harvey M. Deitel, “An Introduction to Operating System”, Addison Wesley, New York, 1999.
3. Andrew S. Tanenbaum, “Modern Operating Systems”, Prentice Hall, New Delhi, 1997.



II YEAR – III SEMESTER
SUBJECT CODE: 9VSD3P1

CORE – VIII - PRACTICAL – DATA STRUCTURE AND ALGORITHMS – LAB

Credits : 4

Hrs / Week : 4

OBJECTIVES

- To give fundamental knowledge on data structures and exposure to development of algorithms related to data structures.

1. Sum of Array elements
2. Search an element in an Array
3. Operations on Stack
4. Operations on Queue
5. Operations on Circular Queue
6. Operations on Singly linked list
7. Operations on Doubly linked list
8. Binary Tree Creation and Traversals
9. Analyze Bubble Sort with number of passes, comparisons and data moves
10. Sequential search in an array
11. Binary Search in an array
12. Convert Infix to Postfix and evaluate Postfix using Stack

Total Hours: 60



II YEAR – III SEMESTER
SUBJECT CODE: 9VSD3P2

Skill Subject

CORE – IX - PRACTICAL – PROGRAMMING WITH C++ - LAB**Credits : 5****Hrs / Week : 5****OBJECTIVES**

- To learn the fundamentals of object-oriented design and implementation in C++.
- To identify and to practice the programming techniques and object-oriented programming concepts such as, classes, inheritance, polymorphism, over loading, over riding, templates and I/O streams using C++ language

1. Functions using
 - i) Call by value
 - ii) Call by reference
 - iii) Recursive call
 - iv) Returning different data types.
2. In-line function, Overloaded function and Default arguments.
3. Operator overloading (Unary and Binary).
4. Class and All types of Constructors.
5. Static function and Array of objects with static data.
6. Friend function and Friend class.
7.
 - i) Simple and Multilevel inheritance
 - ii) Implementing derived class constructors.
8.
 - i) Function overriding
 - ii) Creating objects using Pointers.
9. Virtual functions, pure virtual functions and Abstract class.
10. Dynamic polymorphism.
11. Function Template and Class Template.
12. I/O Streams with text file and data file.

Total Hours: 75

II YEAR – III SEMESTER
SUBJECT CODE: 9VSD3A1

Skill Subject

ALLIED -III – LINUX AND OPEN OFFICE – LAB**Credits : 4****Hrs / Week : 4****Objectives**

- To familiarize the facilities available in Open Office and to learn about the accessibility features within the OpenOffice.org suite of applications and to learn to customize them.
- To learn to install Linux OS and OpenOffice.org 3.x on Microsoft Windows and Linux platforms
- To set OpenOffice.org to automatically open Microsoft Office Generated Files.

LINUX

1. Linux installation
2. Linux Working environment basics
3. Installation and un-installation of Software
4. Creation of files and folders
5. Managing files and folders
6. Drive management
7. User management

OPEN OFFICE

1. Document Creation
2. Formatting documents
3. Inserting objects to documents
4. Table creation and manipulation
5. Mail-merge
6. Spreadsheet creations
7. Managing data in spreadsheets
8. Charts and graphs
9. Creating presentations
10. Formatting and adding animation to presentations

Total Hours: 60

**II YEAR – IV SEMESTER
SUBJECT CODE: 9VSD4G1**

GENERAL - PRACTICAL – PC ASSEMBLING AND TROUBLESHOOTING

Credits : 4

Hrs / Week : 4

OBJECTIVES

- To assemble/setup and to upgrade Personal Computer systems
 - To learn to perform installation, configuration, and to upgrade a Microcomputer Hardware and Software.
 - To learn to diagnose and troubleshoot the microcomputer systems Hardware and Software, and other peripheral equipment issues.
1. Assemble a PC by fixing motherboard, processor and cooling fan.
 2. Fix a Hard drive and DVD and connect the Data, power cables.
 3. Connect the power cables with SMBS
 4. Install windows Operating System with service pack
 5. Install an Audio driver software and check the functionality
 6. General scanner troubleshooting
 - Verify cables connected properly to the back of the scanner
 - Ensure that the scanner is getting power
 - Additional parallel port scanner troubleshooting
 - Verify the LPT port mode
 7. General microphone troubleshooting
 - Sound drivers not setup properly
 - Not connected properly
 - Issues with microphone
 8. General Speaker troubleshooting
 - Sound drivers not setup properly and not connected properly
 - Issues with Speakers
 - Aligning the sound mixers
 9. Testing a computer CD-ROM / DVD drive for failures.
 10. Testing the memory to determine bad sectors.
 11. Testing the Keyboard
 12. Troubleshooting different types of Monitors.
 13. Troubleshooting the Mouse.
 14. Preventing from power surges.
 15. Testing of serial and parallel ports.

Total Hours: 60



II-YEAR-IV SEMESTER

General Subject

SUBJECT CODE: 9VSD4G2

INTERVIEW TECHNIQUES AND INTERPERSONAL COMMUNICATIONS

Credits : 4

Hrs / Week : 4

OBJECTIVES

- To understand the purpose behind the interview process and preparation techniques for the carrier interviews
- To learn about Social skills and Conflict skills to become a successful person
- To acquire interpersonal skills in order to improve the relationships with human behavior

Unit I

(12)

Basic of Interview –Important aspects of interview-Maintaining interview files-Important of background information about the job, the organization and the interviewer-Things to do before interview-preparing for the interview- Facing panel interview-Handling appropriate questions-Standard Interview formats-Sample Questions.

Unit II

(12)

Preparation for interview-Information consideration before the interview-Entering into the interview room-Giving answers to the questions-Recapturing the interviewer's attention-questions to ask towards the end of the interview-Things to do after interview –Second interview.

Unit III

(12)

Interview Behaviors-Grooming for interview-Checklist for interview-Three essential interview Skills-Ten sticky interview situations and handling them-Avoiding ten interview blunders-Job interviews do's and Don'ts- Informal interviews Do's and Don'ts- Ready for unexpected interview-Strengths and weakness-Interview body language-interview etiquette-Basics of group discussion.

Unit IV

(12)

Social Skills and Conflict Management Skills - Component of Social Skills, effective ways of dealing with people - Types of conflict (intrapersonal, intra group and inter group conflicts) - Basic concepts, cues, signals, symbols and secrets of body language - Significance of body language in communication and assertiveness training. - Conflict stimulation and conflict resolution techniques for effective conflict management

Unit V

(12)

Interpersonal Skills - Concept of team in work situation, promotion of team spirit, characteristics of team player - Awareness of ones own leadership style and performance - Nurturing leadership qualities - Emotional intelligence and leadership effectiveness- self awareness, self management, self motivation, empathy and social skills - Negotiation skills- preparation and planning, definition of ground rules, clarification and justification, bargaining and problem solving, closure and implementation



BOOK(S) FOR REFERENCE:

1. Abdulhashen, “Interview Manual”, Ramesh publishing House, New Delhi, 2012.
2. Anandamurugan,S “Placement Interviews”, Tata McGraw Hill
3. Hurlock, E.B (2006). Personality Development, 28th Reprint. New Delhi: Tata McGraw Hill

Note: This paper aims at imparting Soft Skills to the students to become successful person in both interviews and work places. The evaluation for this paper for 100 marks will be carried out in three stages. Interpersonal Communication Skills (25 marks) and Interview Preparation Skills (25 marks) will be evaluated by the faculty who are handling the subject. A Mock Interview (50 marks) will be conducted and evaluated by the faculty of the Department and an external examiner. The cumulative 100 marks will be given by the Department.



II YEAR – IV SEMESTER**COURSE CODE: 7SBS4B1
COURSE I – ACCOUNTING SKILLS****Credits : 2****Hrs / Week : 2****Objectives**

- To introduce basic Accounting principles, ethics in accounting and preparation of financial statements.
- To analyze the business problem by incorporating diverse perspective of accounting techniques and to develop competent decision skills in the areas of accounting

Unit I**(6)**

Introduction to Accounting – Accounting principles – Accounting equation – Double entry system – Characteristics – Classification of Accounting principles.

Unit II**(6)**

Books of Accounting – Journal – Accounting Process – Classification of Accounts – Compound Journal Entries – Important consideration for recording transaction
Leger: Difference between Journal & Ledger – Cashbook and Subsidiary Books – Purchase Books – Invoice, Sales Book, Return Book, Debit and Credit notes

Unit III**(6)**

Trial balance: Meaning of Trial Balance, Objective and Importance of Trial Balance
Errors: Meaning and location of Errors.

Unit IV**(6)**

Financial Accounts: Meaning and typing of Financial Statements, procedure for preparing accounts – Profit and Loss Accounts – Balance Sheet – Manufacturing Account – Adjustment and treatment of adjustment.

Unit V**(6)**

Introduction to Accounting Package – Introduction to Tally: Features, advantages, defining the cells, format the data, entering data, functional keys and simple calculation – Excel: features, advantages, defining the cell range, functional keys, entering the data, defining the functions and simple calculations.

BOOK(S) FOR STUDY:

1. M.C.Shakla, T.S.Grawal and S.C.Gupta – “Advanced Accounts” S. Chand & Company Ltd, New Delhi, Fourteenth Edition, 1999.

BOOK(S) FOR REFERENCE:

1. Mukesh Mahajan, P.S.Gills, V.P.Sharma and H.S.Punia, Fundamentals of Accountancy, Unistar Books Pvt. Ltd., Chandigarh, 2001.
2. Sundeep Sharma, Principles of Accounting (A Complete Hand Book), Shree Niwas Publication, Jaipur, First Edition, 2004.



PART – IV (4)**II YEAR – IV SEMESTER
COURSE CODE: 7BVE4****COURSE – VALUE EDUCATION****Credits : 2****Hrs / Week : 2****Definition**

The learning and practice of facts which have eternal value is what is contemplated by value education. It can also be the process by which a good citizen is moulded out of a human being. The evolution of a good human being is when he realises that his conscience shows to him the rightness of his action.

Objective

- To increase awareness about our National history, Cultural, Heritage, Constitutional rights, National integration, Community development and Environment.
- To impart virtues of values of life among learners and to help them to adopt and become successful in their lives.

Unit I**(6)**

Definition – Need for value Education – How important human values are – humanism and humanistic movement in the world and in India – Literature on the teaching of values under various religions like Hinduism, Buddhism, Christianity, Jainism, Islam, etc. Agencies for teaching value education in India – National Resource Centre for Value Education – NCERT– IITs and IGNOU.

Unit II**(6)**

Vedic Period – Influence of Buddhism and Jainism – Hindu Dynasties – Islam Invasion – Moghul invasion – British Rule – culture clash – Bhakti cult – social Reformers – Gandhi – Swami Vivekananda – Tagore – their role in value education.

Unit III**(6)****Value Crisis – After Independence**

Independence – democracy – Equality – fundamental duties – Fall of standards in all fields – Social, Economic, Political, Religious and Environmental – corruption in society.

Politics without principle – Commerce without ethics – Education without Character – Science without humanism – Wealth without work – Pleasure without conscience – Prayer without sacrifice – steps taken by the Governments – Central and State – to remove disparities on the basis of class, creed, gender.



Unit IV**(6)****Value Education on College Campus**

Transition from school to college – problems – Control – free atmosphere – freedom mistaken for license – need for value education – ways of inculcating it – Teaching of etiquettes – Extra-Curricular activities – N.S.S., N.C.C., Club activities – Relevance of Dr.A.P.J. Abdul Kalam's efforts to teach values – Mother Teresa.

Unit V**(6)****Project Work**

1. Collecting details about value education from newspapers, journals and magazines.
2. Writing poems, skits, stories centering around value-erosion in society.
3. Presenting personal experience in teaching values.
4. Suggesting solutions to value – based problems on the campus.

Recommended Books

1. Satchidananda. M.K. (1991), "Ethics, Education, Indian unity and culture" – Delhi, Ajantha publications.
2. Saraswathi. T.S. (ed) 1999. "Culture", Socialisation and Human Development: Theory, Research and Application in India" – New Delhi Sage publications.
3. Venkataiah. N (ed) 1998, "Value Education" New Delhi Ph. Publishing Corporation.
4. Chakraborti, Mohit (1997) "Value Education: Changing Perspectives" New Delhi: Kanishka Publications.
5. "Value Education – Need of the hour" Talk delivered in the HTED Seminar – Govt. of Maharashtra, Mumbai on 1-11-2001 by N.Vittal, Central Vigilance Commissioner.
6. "Swami Vivekananda's Rousing call to Hindu Nation": EKnath Ranade (1991) Centenary Publication
7. Radhakrishnan, S. "Religion and culture" (1968), Orient Paperbacks, New Delhi.

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**II YEAR – IV SEMESTER
COURSE CODE: 7BMY4**

**COURSE – MANAVALAKALAI YOGA
kdtstf;fiy Nahfh**

Credits : 2

Hrs / Week : 2

OBJECTIVES

- To understand the importance of yoga and its relationship with physical and mental health
- To enable the students to attain physical strengths, higher level of consciousness, strong emotional stability and moral values through various Asanas.

Unit I Yoga and Physical Health (6)

- 1.1 Physical Structure – Three bodies – Five limitations
- 1.2 Simplified Physical Exercises – Hand Exercises – Leg Exercises – Breathing Exercises – Eye Exercises – Kapalapathi
- 1.3 Maharasanas 1-2 Massages – Acu-puncture – Relaxation
- 1.4 Yogasanas – Padmasana – Vajrasanas – Chakrasanas (Side) – Viruchasanas – Yoga muthra – Patchimothasanas – Ustrasanas – Vakkarasanas – Salabasanas

Unit II Art of Nurturing the life force and Mind (6)

- 2.1 Maintaining the youthfulness – Postponing their ageing process
- 2.2 Sex and Spirituality – Significance of sexual vital fluid – Married life – Chastity
- 2.3 Ten Stages of Mind
- 2.4 Mental frequency – Methods for concentration

Unit III Sublimation (6)

- 3.1 Purpose and Philosophy of life
- 3.2 Introspection – Analysis of Thought
- 3.3 Moralization of Desires
- 3.4 Neutralization of Anger

Unit IV Human Resources Development (6)

- 4.1 Eradication of worries
- 4.2 Benefits of Blessings
- 4.3 Greatness of Friendship
- 4.4 Individual Peace and World Peace

Unit V Law of Nature (6)

- 5.1 Unified force – Cause and Effect system
- 5.2 Purity of Thought and Deed and Genetic Centre
- 5.3 Love and Compassion
- 5.4 Cultural Education – Five Fold Culture



WOMEN'S STUDIES

General Subject

**II YEAR – IV SEMESTER
COURSE CODE: 7BWS4****COURSE – INTRODUCTION TO GENDER STUDIES****Credits : 2****Hrs / Week : 2****Objectives**

- To gain knowledge on Gender, Sex, Gender roles, determinisms, identity, ideology and stereotypes in order to get awareness and importance of Gender Equality.
- To familiar about Women Development Policies, Programmes and Women empowerment schemes.

Unit I**(5)**

Gender Identity: Gender Ideology – Sex Vs Gender – Biological Determinism – Dualism – Reductionism – Objectification – Socialization and Internalization

Unit II**(5)**

Gender Roles: Division of Labour – Sex Role – Stereotypes – Gender Role – Work – Family and Gender – Motherhood – Production and Reproduction

Unit III**(5)**

Gender Equality / Equity: Equality Vs Equity, HDI, GDI and GEM – Gender Inequality in Certain Vital Measures of Development: Sex Ration, Life Expectancy, Literacy Level – Work Participation – Decision Making and Political Participation

Unit IV**(5)**

Strength of Women: Hormones and Chromosomes – Physical Differences – Record of the Fastest Men and Women in the World – Athletes – Brain and Intelligence – Emotions.

Unit V**(5)**

Development Policies and Programmes: WID – WAD – GAD – Approaches: Welfare – Anti-Poverty – Efficiency – Equity – Empowerment – Central and State Government Women Development Schemes.

Unit VI**(5)**

Women Empowerment: Meaning and Concepts, Empowerment Levels – Framework – Empowerment Tools – Capability Approach



BOOK(S) FOR REFERENCE:

1. Sahay Sushama, “Women and Empowerment: Approaches as and Strategies”, Discovery Publishing House, Delhi, 1988
2. Kapur Promilla, “Empowering the Indian Women” Publication division, Ministry of Information and Broadcasting, Government of India 2001
3. Thilakavathi G & B.Regina Papa, Gender Sensitization Course Material, Chennai: Tamil Police, 2003
4. Selvy Thiruchandran, Idology, Caste, Class and Gender, A Gender Specific Analysis
5. Poornima Advani, Course Curriculum on Gender Sensitization of Police Officers, New Delhi National Commission for Women 2000
6. Foucault, M. The History of Sexuality, London: Penguin 1981
7. Eleanor Leacock, Women, Power and Authority in invisibility and power ed. Leela Dube etal. Delhi: Oxford University Press, 1986
8. Bayly, C.A. (ed) – An illustrated History of Modern India London: OUP
9. Kamal Bhasin, Understanding Gender, Bangalore: Kali for Women 2001
10. Ann Oakley, Sek, Gender and Society, London: Temple Smith, 1972
11. Hughes, Christina, Key concepts in Feminist Theory and Research London: SAGE Publications, 2002
12. Kurian Priya and foran John. Bhaunani, Kum-Kum Feminist Futures: Re-imagining women, culture and Development, London, New York Books 2003
13. Hess B.Beth. Lorber Judih Ferree Marx Myra. Revisioning Gender Thousand Oaks. London New Delhi SAGE Publication, 1999



II YEAR – IV SEMESTER**SUBJECT CODE: 9VSD4C1****CORE – X – COMPUTER NETWORKS ADMINISTRATION****Credits : 4****Hrs / Week : 5****OBJECTIVES**

- To impart overall knowledge about Computer Communication Networks
- To learn about Computer Communication Network protocols, reference models, security concepts and to familiar about Network Management principles

Unit I**(15)**

Introduction to Computer Networks and Data Communications: Need for Computer Networks – Evolution of Computer Networks – Data Communication Fundamentals – Data Transmission – Transmission Media – Classification of Computer Networks - Switching and Routing – Routing – Multiplexing and Concentration.

UNIT II**(15)**

OSI Reference Model – The Physical Layer – Data Link Layer – Network Layer – Transport Layer – Session Layer – Presentation Layer – Application Layer. Transmission Control Protocol: Network layer – Transport Layer – Application layer.

UNIT III**(15)**

IEEE Standards – The Ethernet – Token Bus – Token Ring – The X.25 Protocol – SNA Model Digital Network Architecture. Local Area Network : LAN Architecture – LAN Advantages and Services – Characteristics of a LAN – LAN Topologies. Wireless LANs – Components of Wireless LANs – Working of Wireless LANs

Unit IV**(15)**

Network Security: Security Requirements and Attacks – Confidentiality with Symmetric Encryption – Message Authentication and Hash Functions – Public – key Encryption and Digital Signatures – Basics of IPv4 and IPv6 Security.

Unit V**(15)**

Network Management: The need for network management – Different devices – Different administration – Concepts – model – Managed nodes – Network Management Stations – Network management protocol. Administrative model – Authentication – Authorization – originating, receiving and listening messages

BOOK(S) FOR STUDY:

1. Rajesh, Eswarakumar, Balasubramanian, “Computer Networks, Fundamentals and Applications”, Vikas Publishing House Pvt. Ltd.,2002. **(Unit I, II, III)**
2. William Stallings, “Data and Computer Communications”, Prentice Hall of India, 7th Ed., 2004. **(Unit IV)**
3. Marshall T Rose, “An Introduction to Networking and Management”, Prentice Hall of India, 2001. **(Unit V)**

BOOK(S) FOR REFERENCE:

1. Behrouz A Fourouzan, “Data Communications and Networking”, McGraw Hill, Fourth Edition, 2006.



II YEAR – IV SEMESTER
SUBJECT CODE: 9VSD4P1

Skill Subject

CORE – XI - PRACTICAL – RDBMS – LAB**Credits : 3****Hrs / Week : 5****OBJECTIVES**

- To introduce the principles and practices of Relational Database Management Systems through SQL commands
- To learn programming with PL/SQL including manipulation of Cursors, Packages and Triggers, Functions & Procedure

SQL

1. DDL: Table Creation and description of tables
2. DML: Data Insertion, Deletion, Updating and Selection.
3. DML: Operators (Arithmetic, Relational, Logical),
4. DML: SQL Functions (Single Row Function, Group Functions).
5. DML: Set operations
6. DML: Join operations
7. Creation of Nested queries
8. Creation of Synonym, Sequence & Index
9. Creation and manipulation of View.

PL/SQL

10. Working with control structures using PL/SQL block
11. Creation and manipulation of Cursors
12. Simple programs using Functions & Procedure
13. Creation and manipulation of Packages
14. Creation and manipulation of Triggers

Total Hours: 75

II YEAR – IV SEMESTER
SUBJECT CODE: 9VSD4P2

Skill Subject

CORE – XII - PRACTICAL – XML – LAB**Credits : 3****Hrs / Week : 4****OBJECTIVES**

- To impart the knowledge about the XML features and its role in Data transformation in Hyper medium.
- To acquire the skills for creating XML documents, DTD, Style sheets using CSS and XSL for real-time requirements.

1. Explanation of XML document Skeleton
2. Simple XML document creation
3. XML document for book sellers
4. XML document for an online E-Commerce portal
5. XML document for a pharmaceutical retailer
6. XML document to maintain the details of physicians in a Hospital.
7. Writing of DTD to minimum of three use cases
8. Validation using DTD
9. Writing of Style sheets using CSS for three XML documents
10. Writing of Style sheets using XSL for three XML documents
11. Creating XSL templates
12. Illustrating XML Namespaces
13. SAX and DOM

Total Hours: 60

II YEAR – IV SEMESTER
SUBJECT CODE: 9VSD4A1

Skill Subject

ALLIED – IV - PRACTICAL - VISUAL BASIC -LAB**Credits : 3****Hrs / Week : 4****OBJECTIVES**

To make the students:

- To introduces computer programming using the Visual BASIC programming language with object-oriented programming principles.
- Emphasis is on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger.

1. Interest Calculation
2. Fibonacci Series
3. Designing a Scientific Calculator using Control Array
4. String Operations
5. Matrix Operations
6. Free Hand Writing
7. Simple MDI Text Editor
8. Creating and Updating a Database
9. Designing a Digital Clock
10. Horizontal and Vertical Scrolling for Changing Colors.
11. Designing a Calendar
12. Student Mark Sheet
13. Database Applications using data control.

Total Hours: 60

**II YEAR- IV-SEMESTER
SUBJECT CODE: 9VSD4P3****CORE – XIII - DOMAIN STUDY****Credits : 5****Hrs / Week : --****Objectives**

- To expose the students about real time working environment, experience and to gain the knowledge through hands on observation and job execution in the Industry.
- To develop skills about Work ethics, Communication, Management and etc.
- To enable the students to relate their theoretical knowledge with the application domain of the Software Development industry.

Each B.Voc. student will be assigned to an Internal guide by the Head of the Department at the starting of IV semester. The students have to choose a particular domain / application area which is practiced in their respective Industries in consultation with the Internal guide. The students have to study their domain extensively in consultation of the Internal guide at the outside of the class hours throughout the semester. This study would covers, characteristics and functionalities of the domain / area, analysis, problem identification, design of solution and etc. At the end of the semester, the student should prepare a domain study report (not less than 30 pages, A4 size) and submit the same to the Internal guide for evaluation. The Internal guide will evaluate the domain study report for 40 marks and this will be treated as Internal marks. The external evaluation for the domain study will be done by conducting viva-voce for 60 marks by the Department with two examiners and the cumulative 100 marks will be given by the Department.



**III YEAR – V SEMESTER
COURSE CODE: 7SBS5A3**

General Subject

COURSE I – ENTREPRENEURIAL DEVELOPMENT SKILLS

Credits : 2

Hrs / Week : 2

OBJECTIVES

- To learn the concepts, principles of Entrepreneurship and to develop Entrepreneurial interest and qualities
- To impart the process and procedure involved in setting up of a small enterprise and to acquire the necessary managerial skills to run a small-scale industry

Unit I

(6)

Concept of Entrepreneurship and basics of selection of project/business

Qualities of an entrepreneur – Classification of industries as tiny, small, medium and large Infrastructure facilities, threats and Opportunities-Corporate Social Responsibility

Unit II

(6)

Preparation of Project Proposal

Introduction to nature of business – techniques of market survey – goal setting, funding institution, departmental licenses and clearance – production capacity – fixed capital – working capital and total investment – costing, pricing, profit assessment – return on capital investment, Break Even Point and Cash Flow

Unit III

(6)

Marketing skills

Salesmanship, credit sales, customer management, negotiation skills, business tie ups, export possibilities and policies

Unit IV

(6)

Management of Men, Materials, Money, Machine and Methods (the 5Ms)

Management of man power, problem solving, purchasing techniques, inventory management– Quality control and standards – resource mobilization – Financial planning, record keeping and accounting, knowledge of employees' welfare measures – plant selection and layout.

Unit V

(6)

Industrial Management

Technology upgradation – value addition – diversification – utilization of waste and by products – concepts of zero discharge

BOOK(S) FOR REFERENCE:

1. Entrepreneurial Development – S.S.Khanna, S.Chand & Co.
2. Entrepreneurial & Management of Small Business – CED, Madurai – 10.
3. Entrepreneurship Development – S.P.Saravanan, Sul



**III YEAR – V SEMESTER
COURSE CODE: 7SBS5A5**

COURSE III – MARKETING AND SALES MANAGEMENT

Credits : 2

Hrs / Week : 2

OBJECTIVES

- To acquire analytical skills for solving marketing related problems and challenges and to familiar with the strategic marketing management process
- To learn the elements of sales force to be an effective component of an organization's overall marketing strategy.

Unit I

(6)

Introduction: Evolution of marketing – Types of marketing: Consumer Products Marketing, Industrial Marketing and Services Marketing – Demographic and Behavioural dimensions of marketing – Marketing Planning

Unit II

(6)

Basics of Market Segmentation, Targeting and Positioning – Components of the Marketing Mix: Product – Price – Place – Promotion – Distribution Channels: Types – Merits and Demerits

Unit III

(6)

Marketing Vs Selling – Nature and scope of sales management – Personal selling and salesmanship – Selling function – understanding consumer's decision making process – sales organization and types of selling

Unit IV

(6)

Prospecting – Approaching the customer – Sales presentation – Sales demonstration – Negotiating buyer concerns – Closing the sale – Post Sales Service and Complaint Handling

Unit V

(6)

Modern Trends in Marketing and Sales: Internet Marketing – Direct Marketing – Multi Level Marketing – Relationship Marketing – Selling through Kiosks

BOOK(S) FOR REFERENCE:

1. Chunawalla, S. A., Sales Management, 5th Edition (2007), Himalaya Publishing House
2. Havaldar, Krishna; Sales and Distribution Management, 1st Edition (2006), Tata McGraw Hill
3. Perreault, Jr., William; McCarthy, E. Jerome, Basic Marketing, 15th Edition, 2006, Tata McGraw Hill



**III YEAR –V SEMESTER
SUBJECT CODE: 9VSD5G1**

MIS AND EDI

Credits : 4

Hrs / Week : 4

Objectives

- To give an understanding of the importance of Information Systems, how it relates to managerial people and end-users
- To impart the vital role of Information Technology in business in the form of E-Commerce methodologies and to impart the knowledge on evolution, implementation and advantages of EDI system

Unit – I (12)

Introduction to Information Systems (IS) - study of IS – need Information Technology (IT) in business - Fundamentals of IS concepts - overview of IS - solving business problems with IS - developing IS solutions.

Unit – II (12)

Information Systems for Business Operations - Business IS - Marketing, manufacturing, human resource, accounting and financial information systems - transaction processing system - management information and decision support systems.

Unit – III (12)

Electronic Data Interchange - Meaning; EDI and Paperless trading; EDI architecture; EDI standards; VAN; Cost of EDI Infrastructure; Internet based EDI; FTP- based messaging.

Unit – IV (12)

E-Commerce Strategies - Consumer Oriented – strategies for marketing, sales & promotion, e-CRM, order delivery Cycle; Business Oriented - strategies for purchasing & support activities (SCM), Strategies for Web Auction, Virtual Communities, Web Portal. **Electronic Payment System** - Introduction to payment system; Online Payment System – prepaid e-payment service, postpaid e-payment system; SET protocol; Operational, Credit & legal risk of e-payment system.

Unit – V (12)

E-Commerce Infrastructure - Cluster of servers; Virtualization techniques; Cloud Computing; Server Consolidation using cloud; Introduction to Hadoop, HDFS, Google Apps Engine.

BOOK(S) FOR STUDY:

1. James A O'Brien, "Management Information Systems for managing IT in the Internet networked Enterprise", 4th edition, Tata McGraw Hill Publishing Company Limited, New Delhi, 1999. (Units I and II)
2. Kalakota et al, "Frontiers of Electronic Commerce", Addison Wesley, 2004. (Units III, IV, V)



III YEAR –V SEMESTER
SUBJECT CODE: 9VSD5G2

General Subject

QUANTITATIVE APTITUDE

Credits : 2

Hrs / Week : 2

Objectives

- To demonstrate various principles involved in solving mathematical problems and thereby reduce the time taken for performing job functions and to enable the students to acquire skills for facing their job interviews
- To learn to critically evaluate and solve various real life problems using mathematical techniques and to know how to present data graphically using histogram, frequency polygon and pie charts.

UNIT I (6)

Numbers, HCF, LCM, Decimal Fractions, Simplification, Square Roots, cube roots, averages, Problems in numbers and ages.

UNIT II (6)

Surds, Indices, Percentages, Profit and Loss, Ratio and Proportion, Partnership, Chain Rule, Time and Work, Pipes and Distances.

UNIT III (6)

Time and distance, Problems on Trains, Boats and Streams, Allegation, Simple Interest, Compound Interest, Logarithms, Area.

UNIT IV (6)

Volume and Surface Area, Races and Games of Skill, Calendar, Clocks, Stocks and Shares, Permutation and Combination, Probability.

UNIT V (6)

True discount, Banker's Discount, Height and Distances, Odd man out and Series, Tabulation, Bar graphs, Pie charts, Line Graphs.

BOOK(S) FOR STUDY

1. R. S. Aggarwal, "Quantitative Aptitude for Competitive Examinations", Seventh Revised Edition, S. Chand and Co. Ltd, New Delhi, 2005.

BOOK(S) FOR REFERENCE:

1. Barron's Guide for GMAT, Galgotia Publications, New Delhi, 2006.

Note: This paper is having the objective of imparting required skills in order to face preliminary screening tests during the placement interviews. At the end of the semester, an evaluation will be done for 100 marks with 50 objective type questions each of two marks.



III YEAR –V SEMESTER**SUBJECT CODE: 9VSD5C1****CORE – XIV – PROGRAMMING WITH JAVA****Credits : 4****Hrs / Week : 4****Objectives**

- To understand and familiar with Object-Oriented concepts and the power of Java language in Internet programming.
- To understand the facilities of Java language such as, Applets, Exception handling and I/O streams.

Unit – I**(12)**

Basic Concepts of OOPS - Benefits of OOPS- Java History-Java Features- Java Environment- Java Tokens- Constants- Variables- Data Types – Operators and Expressions- Decision Making and Branching- Decision Making and Looping.

Unit – II**(12)**

Classes, Objects and Methods: Classes and Objects- Constructors- Method Overloading- Static Members- Inheritance- Overriding Methods- Final Variables, Final Methods and Final Classes- Finalizer Method- Abstract Methods and Abstract Classes- Visibility Control- Arrays- Strings.

Unit – III**(12)**

Applets: The Life Cycle of an Applet – The Applet Class – Development and Execution of a Simple Applet – Syntax of Applet Tag – Methods in the Graphics Class. **Abstract Windowing Toolkit:** Events – Listeners – Event Handling Methods.

Unit – IV**(12)**

Exception Handling: Default Exception Handling – Exception and Error Classes – Catch Block Searching Pattern – ‘Throw’ Statement – ‘Throws’ Statement – Custom Exceptions. **Threads:** Life Cycle of a Thread – Creating and Running Threads – Methods in the Thread Class – Setting the priority of a thread – Synchronization – Dead Lock – Inter Thread Communication.

Unit – V**(12)**

I/O Streams: Input Stream and Output Stream classes – Reader and Writer classes – Data Output Stream and Data Input Stream Classes. **Database Connectivity:** JDBC-ODBC Connection.

BOOK(S) FOR STUDY:

1. E.Balagurusamy, “Programming with JAVA”, Tata McGraw Hill, New Delhi, 4th edition. 2009. **(UNIT I,II)**
2. C.Muthu, “Programming with JAVA”, Vijay Nicole Imprints Private Limited, Chennai, Second Edition, 2011. **(UNIT III, IV, V)**

BOOK(S) FOR REFERENCE:

1. Herbert Schildt, Complete Reference Java 2, Tata McGraw-Hill Publishing Company Limited, Fifth Edition, 2009.



**III YEAR –V SEMESTER
SUBJECT CODE: 9VSD5E1**

Skill Subject

ELECTIVE - I: SOFTWARE ENGINEERING

Credits : 4

Hrs / Week : 4

OBJECTIVES:

- To introduce the basic concepts of Software Engineering and the various phases in Software Development in order to make the students to become a Software developer with conventional SDLC methodologies

UNIT I

(12)

Introduction: The Software Engineering Discipline - Software Development Projects - Emergence of Software Engineering - Software Life Cycle Models: Classical Waterfall Model - Iterative Waterfall Model - Prototyping Model - Spiral Model.

UNIT II

(12)

Software Project Management: Responsibilities of a Software Project Manager - Project Planning - Metrics for Project Size Estimation - Project Estimation Techniques - Empirical Estimation Techniques - COCOMO - Risk Management - Requirements Analysis and Specifications: Requirements Gathering and Analysis - SRS.

UNIT III

(12)

Software Design: Cohesion and Coupling - Function-Oriented Software Design: Structured Analysis - DFDs - Structured Design - Object Modeling: Overview of Basic Object-Oriented Concepts - UML Diagrams - Activity Diagram - State Chart Diagram - User Interface Design: Characteristics of a Good User Interface - Basic Concepts.

UNIT IV

(12)

Coding and Testing: Coding - Software Documentation - Testing - Unit Testing - Black-Box Testing - White-Box Testing - Debugging - Integration Testing - System Testing - Software Reliability and Quality Management: Software Reliability - Software Quality and Management System.

UNIT V

(12)

Computer Aided Software Engineering: Case Environment - Characteristics of CASE Tools - Maintenance: Characteristics of a Software Maintenance - Software Reverse Engineering - Estimation of Maintenance Cost - Software Reuse: A Reuse Approach.

BOOK(S) FOR STUDY:

1. Rajib Mall, "Fundamentals of Software Engineering", PHI Learning, Private Limited, New Delhi, Third Edition, 2010.

BOOK(S) FOR REFERENCE:

- Roger S. Pressman, "Software Engineering – A Practitioner's Approach", 6th Ed., McGraw Hill International, 2005.
- K.K. Aggarwal and Yogesh Singh, "Software Engineering", New Age International Publishers, Revised Second Edition 2005.



**III YEAR –V SEMESTER
SUBJECT CODE: 9VSD5E2**

Skill Subject

ELECTIVE - II: OBJECT ORIENTED SOFTWARE ENGINEERING

Credits : 4

Hrs / Week : 4

OBJECTIVES

- To impart the basic concepts and principles of Object Oriented Software Engineering and the role of OOSE in Software Development process so as to produce Software developers in Object Oriented programming environments

Unit - I

(12)

Introduction - An overview – Object basics – Object state and properties – Behavior – Methods – Messages – Information hiding – Class hierarchy – Relationships – Associations – Aggregations- Identity – Dynamic binding – Persistence – Metaclasses – Object oriented system development life cycle.

Unit - II

(12)

Object Oriented Analysis - Identifying Use case – Business object analysis – Use case driven object oriented analysis – Use case model – Documentation – Classification – Identifying object, relationships, attributes, methods – Super-sub class – A part of relationships Identifying attributes and methods – Object responsibility

Unit III

(12)

Software Quality - Quality assurance – Testing strategies – Object orientation testing – Test cases – Test Plan – Debugging principles – Usability – Satisfaction – Usability testing – Satisfaction testing

Unit - IV

(12)

Methodology and UML - Introduction – Survey – Rumbaugh, Booch, Jacobson methods – Patterns – Frameworks – Unified approach – Unified modeling language – Static and Dynamic models – UML diagrams – Class diagram – Usecase diagrams – Dynamic modeling – Model organization – Extensibility.

Unit - V

(12)

Fundamentals of Object Oriented Design in UML - Static and dynamic models, why modelling, UML diagrams: Class diagram, interaction diagram: collaboration diagram, sequence diagram, statechart diagram, activity diagram, implementation diagram, UML extensibility- model constraints and comments, Note, Stereotype.

BOOK(S) FOR STUDY:

1) Ali Bahrami, “Object Oriented System Development”, McGraw Hill International Edition, 1999.

BOOK(S) FOR REFERENCE:

1) Grady Booch, James Rumbaugh, Ivar Jacobson, “The UML User Guide”, Addison Wesley Long man, 1999.

2) Bernd Bruegge, Allen H. Dutoit, “Object Oriented Software Engineering using UML, Patterns and Java”, Pearson, 2004.



III YEAR –V SEMESTER
SUBJECT CODE: 9VSD5P1

CORE – XV - PRACTICAL – MICROPROCESSOR – LAB

Credits : 3

Hrs / Week : 3

OBJECTIVES

- To enable the students to learn basics and programming concepts of Intel 8085
- To demonstrate the ALP techniques in a simulated environment

1. ALP to perform simple data transfer using 8085
2. ALP to perform addition using 8085
3. ALP to perform subtraction using 8085.
4. ALP to perform Multiplication using 8085.
5. ALP to perform Division using 8085.
6. ALP to find biggest of two numbers using 8085.
7. ALP to find Sum of series of 10 numbers and store result using 8085
8. ALP to sort given 10 numbers in ascending order using 8085
9. ALP to sort given 10 numbers in descending order using 8085
10. ALP to find the square root of given number using 8085

Total Hours: 45



III YEAR –V SEMESTER
SUBJECT CODE: 9VSD5P2

Skill Subject

CORE – XVI - PRACTICAL – PROGRAMMING WITH JAVA – LAB**Credits : 4****Hrs / Week : 4****Objectives**

- To develop Java programs to solve well specified problems and to able to debug and test Java programs
- To understand Java libraries, Interfaces, Packages, Threads and I/O streams, Applets and JDBC and to effectively use them in Distributed / Internet programming environment.

1. Creating simple Classes and Objects
2. Creating Constructor and Destructor
3. Working with Copy Constructor
4. Working with parameterized constructor
5. Working with Inheritance
6. Illustrating Method Overloading
7. Working with Method Overriding
8. Creation of Interfaces
9. Creation and implementation of Packages
10. Working with Threads
11. Illustrating Multithreading
12. Working with Input / Output streams
13. Drawing images using Applet
14. JDBC connectivity

Total Hours: 60

**III YEAR –V SEMESTER
SUBJECT CODE: 9VSD5P3**

Skill Subject

Credits : 3 **CORE – XVII - PRACTICAL – SOFTWARE DESIGN - LAB**
Hrs / Week : 3**OBJECTIVES:**

- To impart comprehensive knowledge on various Software Testing principles, Techniques and Tools.
 - To enable the students to use the Software Testing tools in an effective manner so as to debug a code themselves
1. Parts of UML diagrams
 2. Create following UML diagrams for Bank ATM Transaction System
 - Class Diagrams
 - Use case Diagrams
 - Sequence Diagrams
 - Component Diagrams
 - Collaboration Diagrams
 3. Create following Static UML diagrams for Library Management System
 - Class Diagrams
 - Component Diagrams
 - Deployment Diagram
 4. Create following Dynamic UML diagrams for Student Mark Analysing System
 - Use case Diagrams
 - Sequence Diagrams
 - Collaboration Diagram
 - State chart Diagram
 - Activity Diagram

Total Hours: 45

III YEAR – VI SEMESTER

General Subject

COURSE CODE: 7SBS6B3**COURSE I – BASIC INTERNET AND OFFICE AUTOMATION LAB****Credits : 2****Hrs / Week : 2****Objectives**

- To equip students with basic computer operations, operating systems, software utilities, data processing & office automation skills.
- To familiar the working with Internet and its services, like e-mail and web browsers

The course will have a professional computer skill and practical oriented.

Unit I - INTERNET

1. Create & demonstrate an E-mail Id in any one of the mail server?
2. Write the step by step procedure to send a letter to your friend through E-mail and demonstrate with your system.
3. Write and demonstrate the procedure to apply for the post with the attachment of your BIODATA to any one of the company through E-mail
4. a) Demonstrate the procedure to copy a given file to the CD,USB DEVICE, FLOPPY DISK
b) Write the steps to zip & unzip the given file in Windows.
c) Demonstrate the steps to scan the picture with the help of the scanner & to perform the zooming operation.
5. Website using any one of the search engine.

Unit II - MS-WORD

1. Prepare a PONGAL and DEEPAVALI greeting cards with picture insertion and alignment, write the procedure to take hard copy.
2. Prepare a letter using mail merge facilities to send the admission cards to the selected candidates for the various courses offered by the University.
3. Using MS-Word Prepare your own biodata with the help of the template and using numbering and bullets where ever necessary.
4. Create the table with following data:
Account number, Debit, Credit, Balance amount
Enter the data and perform the various operations in Table.
5. Type the document and do the following:
 - a) Find and replace the word.
 - b) Extract some paragraph to another file
 - c) Perform spell check operations
 - d) Perform the various operations in the format menu.

Unit III - MS-EXCEL

1. Create the worksheet in MS-EXCEL to store the following information:
Reg.no Name Mark1 Mark2 Mark3 Total Average



- using formula and function find the total, average maximum, minimum total marks
- sort the names in alphabetical order
- create the bar chart for average mark with proper titles, legend and gridlines.

2. Prepare the attendance report for the following in Excel

STUDENT ATTENDANCE REPORT

Course Name: BCA

Semester II

Total number of working days: 80

RegNo	Name	No. of Absent	No. of Present	Percentage of Attendance
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- Create a worksheet in MS-Excel with following details
 - Employee number, Employee name, Designation, Basic pay and LIC, PF
 - Calculate

HRA	=	20% of Basic
DA	=	30% of Basic
Gross Pay	=	Basic Pay + HRA + DA
Net Pay	=	Gross Pay – (LIC+PF)
- Create a worksheet in ms excel with the following details:

Name, Description of the item, price of each item, quantity purchased, stock in hand, Enter the 5 data in the above format

 - Calculate amount=price* quantity
 - In table sort the field item wise

Unit IV - POWERPOINT

- Prepare three slides in Power point showing the features of MS OFFICE and also set timings to view it.
- Prepare three slides for showing the types of computers with the following settings:
 - Set different slide transitions
 - Give header & footer for each slide
 - Set slide timings for each slide
- Prepare three slides with a text & picture expressing the introduction of new product.
- Prepare five slides with a text and picture for various courses offered by the University with animation effect.

Unit V

DTP – Page maker – Coral Draw – Photoshop- Flash

BOOK(S) FOR REFERENCE:

- PC Software For Windows By R.K.Taxali – Tata Mc Graw-Hill
- DTP Course Kit by Vikas Gupta – 2007 Comdex publications
- Photoshop 6 In Depth–David Xenakis Benjamin Levisa–Dream Tech Press,New Delhi

Total Hours: 30



**III YEAR – VI SEMESTER
COURSE CODE: 7SBS6B4**

General Subject

COURSE II – FRUIT, VEGETABLE PRESERVATION SKILLS

Credits : 2

Hrs / Week : 2

Objectives

- To understand the science, principles and techniques involved in fruits and vegetables preservation techniques
- To impart thorough knowledge on the technical skills in various aspects of food processing and preservation

Unit I

(6)

Principles, Methods, types of Preservation.

Preservation media and mode of action of preservation. Traditional & Modern methods.

Unit II

(6)

Study of various types of equipments – care & precautions and usage.

Study of various types of containers.

Unit III

(6)

Vegetables & their product preservation Methods

Importance of personal hygiene and sanitary standards

Unit IV

(6)

Fruits & their preservation

Unit V

(6)

Project:

1. Mapping of preservation practices & centres
(or)
2. Preservation practices specific to fruits & Vegetables in your area
(Project Report 15 to 25 Pages)

BOOK(S) FOR REFERENCE:

1. Srivastava R.P. and Kumar.S “Fruit and Vegetable Preservation: Principles”
2. Ranjit Singh “Fruits” National Book Trust.
3. Girdhari Lal Tandon et al “Preservation of Fruit and Vegetable Products”.



**III YEAR – VI SEMESTER
COURSE CODE: 7SBS6B5**

General Subject

COURSE III – EQUIPMENT HANDLING SKILLS FOR EVENTS

Credits : 2

Hrs / Week : 2

OBJECTIVES

- To impart the characteristics of various types of electrical and electronic equipments used in events
- To learn about the working, handling and troubleshooting Skills on various electrical and electronic gadgets

Unit I **(6)**

Event that require different electrical & electronic gadgets – Positioning mikes, speakers, LCD Projectors collar mikes & screen

Unit II PA System and Audio Recording **(6)**

Components of PA System – Working principles of amplifier, mike and speaker – Wiring system trouble shooting and rectification – tape recorders and principles of operation – troubleshooting and maintenance

Unit III VCD/DVD Handling and Videography **(6)**

Operating principles of VCD and DVD – TV connection – principles of Videography – operation of video-cameras

Unit IV LCD Operations and Power-Point Presentation **(6)**

Principles of LCD – mode setting – visibility adjustments – computer incorporation – power point presentation

Unit V Photography and Image Editing **(6)**

Principles – manual and digital cameras – view setting and focus – computer interface – image editing – CD writing.

BOOK(S) FOR REFERENCE:

1. “Using Information Technology” Williams Sawyer, Hut Chinson Tata Mc Graw-Hill
2. “Introduction to Information System” James A.O.Bries Tata Mc Graw-Hill
3. “Digital Image Processing” Rafael C. Gonzalez Richard E Wood, Prentice Hall of India



III YEAR –VI SEMESTER
SUBJECT CODE: 9VSD6G1

General Subject

CORPORATE GROOMING AND FINISHING SKILLS

Credits : 4

Hrs / Week : 4

OBJECTIVES

- To enhance and sharpen the required skills and proper business etiquettes among the students to build good corporate relationship with the customers and their colleagues
- To learn to build a consistent professional image with respective organization's vision and mission.

Unit I

(12)

Professionalism: Professional approach & behaviour – rational vs. emotional decisions – analysis of self-competence and self confidence – qualities of an effective executive

Unit II

(12)

Corporate Etiquette: Dressing occasions – formal – semi formal and informal – Eating habits– Table manners – Body language: Kinesics and proximity

Unit III

(12)

House Keeping Skills: Cleanliness at work place – Organizing the Work Table and Shelves – Spatial Utility and Energy Saving habits – Office Files and Personal Computer / Laptop management

Unit IV

(12)

Front Office Skills: Reception and Greeting – Telephone manners – effective visitor appointments management – Preparation to attend office meetings – preparation to hold office meetings

Unit V

(12)

Documentation: Objectives, Report writing, How to write minutes, Preparation methods, and Report for media?

BOOK(S) / WEBSITE(S) FOR REFERENCE

1. Naveen Kumar, Sudan A. S; Managerial Skill Development, First Edition (2004), Anmol Publications
2. Lesikar & Flatley, Basic Business Communication, New Delhi: Tata McGraw Hill
3. www.executiveworld.com
4. www.selfconfidence.co.uk
5. www.senselang.com



III YEAR –VI SEMESTER
SUBJECT CODE: 9VSD6G2
COMPREHENSIVE STUDY

General Subject

Credits : 4

Hrs / Week : --

OBJECTIVES

- To refresh the knowledge of students in various fields of Computer Science / Software Development in order to prepare them to face their career interviews.

Unit I: Applications of Operations Research

Unit II: Programming concepts in C, C++, JAVA

Unit III: Concepts of Database Systems

Unit IV: Computer Networks and Operating system Concepts

Unit V: Software Engineering: Analysis, Design, Implementation and Testing

BOOK(S) FOR REFERENCE:

For Unit I

1. Rathindra P. Sen, "Operations Research Algorithms and Applications", PHI, New Delhi, EEE. 2010.

For Unit II

2. Brian W. Kernighan, Dennis M. Ritchie, "The C Programming Language", Prentice Hall of India Pvt. Ltd., New Delhi, 1989.
3. Bjarne Stroustrup, "The C++ Programming Language", Addison-Wesley, New York, 1999
4. Patrick Naughton and Herbert Schildt, "JAVA 2 - The Complete Reference", Fifth Edition, Tata-McGraw-Hill, New Delhi, 2002.

For Unit III

6. S.K. Singh, "Database Systems – Concepts, Design and Applications", Dorling Kindersley (India) Pvt. Ltd., Second Impression, 2008.

For Unit IV

7. William Stallings, "Data and Computer Communications", Pearson Education, India Ltd,
8. S.E Madnick and J J Donovan "Operating Systems" McGraw Hill International Book Co, New Delhi , 1987

For Unit V

9. K.K. Aggarwal & Yogesh Singh, "Software Engineering", New Age International Publishers, Revised Second Edition, 2005

Note: This paper aims at seamless preparation of the students for attending / facing placement technical interviews. This paper has no contact hours, however, the class mentor will give continuous instructions for preparation. At the end of the semester, an evaluation will be done for 100 marks with 100 objective type questions. The question paper will be prepared and evaluated by the Department itself



**III YEAR –VI SEMESTER
SUBJECT CODE: 9VSD6E1**

ELECTIVE – II : SOFTWARE PROJECT MANAGEMENT

Credits : 5

Hrs / Week : 5

Objectives

- To impart knowledge about Software characteristics and activities covered by Software Project management.
- To develop the skills related to Project Planning, Software requirement analysis models, Project Execution approach and Risk Management strategies in order to enrich the students to become an efficient Software Project managers

Unit: 1

(15)

Software Characteristics, Software process, Software Engineering, Characteristics of Software Project, Activities covered by Software Project Management, Problems involved, Management function related to Project Management, Feasibility Analysis

Unit: II

(15)

Project Planning: Overview, Finalising Project Scope, Infrastructure, Analysing Project Characteristics, Identifying Project goals and activities, Estimating time & effort, allocating resources, Review plan

Unit: III

(15)

Project Execution Approach: Choosing Technologies, Structure Vs Speed of Delivery Waterfall Model, V- Process Model, Evolutionary model, Spiral Model, Software Prototyping, Incremental Delivery., Controlling changes during project execution

Unit: IV

(15)

Software requirement study and Analysis, Software Requirement Specifications, Software Estimation : Need for Software Estimation, Problems with Over and Under Estimation, Software Estimation techniques, Expert Judgement, Estimating by Analogy, Function Point Analysis, Object points, LOC based COCOMO model.

Unit: V

(15)

Risk Management: Risk and its implication, types of risk, Identifying risks, analyzing risks, prioritizing risks, Risk avoidance, Risk containment, Resource identification, Resource planning Resource allocation, monitoring critical resources.

BOOK(S) FOR STUDY:

1. Bob Hughes and Mike Cotterell, “Software Project Management”, Tata McGraw Hill, Fifth Edition, 2011.

BOOK(S) FOR REFERENCE:

1. Roger S Pressman, “Software Engineering a Practitioner’s approach”, Tata McGraw Hill, Seventh Edition, 2010.
2. Ince, Dorrel, Helen Sharp & Mark Woodma, “Introduction to Software Project Management & Quality Assurance”, Tata McGraw Hill, 1993.



III YEAR –VI SEMESTER
SUBJECT CODE: 9VSD6E2

Skill Subject

ELECTIVE – II : SOFTWARE QUALITY ASSURANCE

Credits : 5

Hrs / Week : 5

OBJECTIVES:

- To impart basic knowledge about Software quality, quality management processes and to distinguish between the various activities of quality assurance, quality planning and quality control.
- To understand the importance of standards in the quality management process and their impact on the final product to become a Software Quality checker

UNIT I**(15)**

Introduction to Software Quality: Software Quality – Hierarchical models of Boehm and McCall – Quality measurement – Metrics measurement and analysis – Gilb's approach – GQM Model

UNIT II**(15)**

Software Quality Assurance: Quality tasks – SQA plan – Teams – Characteristics – Implementation – Documentation – Reviews and Audits Software Quality, Product versus Process Quality management, techniques to help enhance software quality,

UNIT III**(15)**

Quality Control and Reliability: Tools for Quality – Ishikawa's basic tools – CASE tools – Defect prevention and removal – Reliability models – Rayleigh model – Reliability growth models for quality assessment

UNIT IV**(15)**

Quality Management System: Elements of QMS – Rayleigh model framework – Reliability Growth models for QMS – Complexity metrics and models – Customer satisfaction analysis.

UNIT V**(15)**

Quality Standards: Need for standards – ISO 9000 Series – ISO 9000-3 for software development – CMM and CMMI – Six Sigma concepts. Software Validation and Verification and Quality plans

BOOK(S) FOR STUDY:

1. Mordechai Ben – Menachem and Garry S.Marlist, "Software Quality", Thomson Asia Pte Ltd, BS Publications, Second Edition, 2014.

BOOK(S) FOR REFERENCE:

1. Ince, Dorrel, Helen Sharp & Mark Woodman, "Introduction to Software Project Management & Quality Assurance", 1993.
2. Norman E. Fenton and Shari Lawrence Pfleeger, "Software Metrics" Thomson, 2003.
3. Mary Beth Chrissis, Mike Konrad and Sandy Shrum, "CMMI", Pearson Education, (Singapore) Pte Ltd, 2003.



III YEAR –VI SEMESTER
SUBJECT CODE: 9VSD6P1

Skill Subject

CORE – XVIII - PRACTICAL – PHP PROGRAMMING – LAB
Credits : 4 **Hrs / Week : 5**

OBJECTIVES:

- To introduce and impart the programming principles, language structures of PHP
- To enable the students to create a complete Website using PHP and MySQL

1. Simple programs using PHP
2. Simple programs using Controls and Functions
3. Working with functions
4. Programs for working with String Functions
5. Illustrating the working with Arrays.
6. HTML forms and PHP
7. Passing Variables to PHP from HTML forms.
8. Creating simple Database in MySQL and connectivity with PHP
9. Display Student Information using PHP and MySQL.
10. Develop a College Application Form using PHP and MySQL
11. File System Functions, Network Functions, Date and Time Functions.
12. File Upload and Converting Image File Types
13. Maintenance of Session.
14. Managing Cookies.
15. Message Passing Mechanism between Pages

Total Hours: 75

**III YEAR –VI SEMESTER
SUBJECT CODE: 9VSD6E3**

Skill Subject

ELECTIVE - III – DISTRIBUTED PROGRAMMING – LAB**Credits : 4****Hrs / Week : 5****OBJECTIVES**

- To understand the underlying concepts of distributed programming techniques in developing a Software product using distributed environment.
- To understand and implement timing and other events in distributed environment and to understand and use the concepts of ADO.NET and AJAX

1. Form Design using Various Web Controls
2. Ad Rotator and Calendar Control, Login Control (Page Should Expire after 3 wrong attempts)
3. Working with Validation Controls
4. Illustrating Cookie Manipulation
5. State Management (using Session and Application)
6. Data Retrieval, Updating using ADO.NET (using Stored Procedure)
7. Template Creation using DataList and DataGrid
8. Sorting and Paging using DataGrid
9. Day Planner Preparation using XML and ADO.NET
10. Illustrating Data Caching
11. Partial Page Refresh using AJAX
12. Creating and Testing a Simple Web Service

Total Hours: 75

III YEAR –VI SEMESTER
SUBJECT CODE: 9VSD6E4

ELECTIVE - III – PRESENTATION TECHNOLOGIES – LAB

Credits : 4

Hrs / Week : 5

Objectives

- To impart knowledge about Presentation Technologies such as, JSP and ASP.NET environment
- To illustrate and appreciate the power of both JSP and ASP.NET in Session maintenance, Database connectivity and Maintenance of objects

1. Simple program using JSP
2. Control structures in JSP
3. Illustration of Get and Post method
4. Passing values from HTML form to JSP code
5. Session maintenance in JSP
6. Database connectivity in JSP
7. Cookie maintenance in JSP
8. Testing Request and response Objects using ASP .NET framework
9. Testing Application and Session Objects using ASP .NET framework
10. Testing Validation Controls using ASP .NET framework
11. Database Access – ADO.NET using ASP .NET framework
12. Components Creation and Usage using ASP .NET framework
13. Use of DataGrid and DataList using ASP .NET framework

Total Hours: 75



III YEAR –VI SEMESTER**SUBJECT CODE: 9VSD6I1****INDUSTRIAL INTERNSHIP WITH PROJECT – III****Credits : 5****Hrs / Week : 7****OBJECTIVES**

The objective of B.Voc Software Development Programme is to produce Software Professionals and they are able:

- To get employment in industry, government, or entrepreneurial endeavors to demonstrate professional advancements through significant theoretical and practical knowledge and expanded leadership responsibilities.

The student has to attach himself / herself with an organization related to his / her specialization approved by the Department for a period of 2 weeks for Industrial Internship Training with Project. One personnel of that industry and a faculty of the Department will be external and internal guides of the project respectively. The project theme, work flow and other related guidelines can be had from the Industry. The development of the project may be done in the Department by utilizing 7 lab hours per week and the monitoring of the progress and project evaluation for 50 marks can be collectively done by both internal and external guides. At the end of the internship, the student should prepare a project documentation report (not less than 50 pages, A4 size). Student should also produce a certificate of internship from the organization. The final project viva-voce for 50 marks should be conducted by the Department with two examiners and the cumulative 100 marks will be given by the Department.

