பருவம்: முதற் பருவம்   பாடக் குறியீட்டு எண்: **LTC 101S**

அலகு   பாடங்கள்

(மரபு கவிதையும், புதுக்கவிதையும்)

1   1.1 பாரதி – பாரததேசம்

      1.2 பாரதிதாசன் - உலகப்பன் பாட்டு

      1.3 கண்ணதாசன் - ஊதாரிப்பிள்ளை

      1.4 வைரமுத்து – புதிய ஏற்பாடு

      1.5 மு. மேத்தா – தேசப்பிதாவுக்குத் தெருப்பாடகனின் அஞ்சலி

(காப்பியங்கள். சமயப்பாடல்கள், சிற்றிலக்கியம்)

2   2.1 சிலப்பதிகாரம் - கனாத்திறம் உரைத்த காதை

      2.2 மணிமேகலை – ஆதிரை பிச்சையிட்ட காதை

      2.3 கம்பராமாயணம் - குகப்படலம்

      2.4 மாணிக்கவாசகர் - திருவாசகம்

      2.5 தாயுமானவர் - பராபரக் கண்ணி (5)

      2.6 குற்றாலக் குறவஞ்சி (3)

(சிறுகதைகள்)

3   1 இந்துமதி – குருத்து

      2. கு.அழகிரிசாமி – அன்பளிப்பு

      3. அறிஞர் அண்ணா – செவ்வாழை

(உரைநடை)

4   4. மு.வ – நல்வாழ்வு – பண்பாடு, பொதுமை ஓர் அறம், நீந்துக

(மொழி பெயர்ப்பு)

5   5 கணினித் துறைக் கலைச்சொற்கள்

      6 ஆட்சித் துறைக் கலைச்சொற்கள்

      7 ஆட்சித் துறை பகுதி

      8 விளம்பரப் பகுதி

SEMESTER – I FOUNDATION COURSE – ENGLISH – I LEC101S

UNIT- I PROSE   **[15 HRS]**
My Early Days – A.P.J. Abdul Kalam
Headache – R.K. Narayan
Six Thinking Hats – Edward de Bono

UNIT- II POETRY   **[15 HRS]**
The Road not Taken – Robert Frost
The Unknown Citizen – W.H. Auden
Do not go gentle into that good night – Dylan Thomas

UNIT-III   **[15 HRS]**
 SPOKEN COMMUNICATION SKILLS
Agreeing and Disagreeing
Seeking and Giving permission
Sounds and Symbols in English
Word and Sentence stress
Effective use of Intonation

UNIT – IV   INTERPERSONAL COMMUNICATION   **[15 HRS]**
Effective Listening
        Understanding the Audience
        Perceptual Clarity
        Channel Awareness
        Role of Nonverbal Communication
Pragmatics

UNIT-V
WRITTEN COMMUNICATION SKILLS   **[15 HRS]**
Note Making.
Report Writing
Letters for business correspondence

Text
1. Ravindran, Padma and M.D.V Kalyani Annie, eds. **Interface – 1**. Chennai: Foundation Books, 2007.
2. Orient Longman, **SelectedCollege Poems**, Chennai : Orient Longman Limited, 1994.
3. Bhatnagar, R.P., and Rajul Bharagava, **English for Competitive Examinations**. Chennai: Macmillan India Press, 2002.

Reference

1. Prince, Donna. **Skills for Success**, New York: CUP 1998.
2. Wallace, Michael, J. **Study Skills in English**. Kottayam: CUP, 2004.

SEM – I   PROGRAMMING IN C   CA101S

UNIT-I   **[15 Hrs]**
C Fundamentals: Character set – Identifiers - keywords - Data types-Constants –Variables –Declarations – Expressions - Statements-Operators - Library functions.

UNIT-II   **[15 Hrs]**
Control Statements: Data Input/Output functions - Simple C programs - flow of control-control structures - switch, break and continue - Go to statement-comma operator.

UNIT-III   **[15 Hrs]**
Functions: Defining, accessing functions - functions prototypes-passing arguments - call by value - call by reference - Recursions-storage classes.

UNIT-IV   **[15 Hrs]**
Arrays: Defining and processing – passing arrays of functions- Arrays and string – Structures - passing structures to functions - self-referential structures - unions.

UNIT-V   **[15 Hrs]**
Pointers: Declarations - passing pointers to functions - operation with pointers - pointer and arrays - arrays of pointers - structure and pointers – Files and its operations.

TEXT BOOKS:
1. E. Balagurusamy -Programming in Ansi C -Tata McGraw Hill Pub
2. Byron S.Gottfied - Schaum's outline Theory and problems of programming with C. Tata McGraw Hill Pub
3. Yeshwanth Kanethkar -Let us C -.BPB Publications
4. K.R.Venugopal, S.R.Prasad -Mastering C – Tata McGraw Hill Pub

SEM – I   DIGITAL LOGIC FUNDAMENTALS   CA102T

Objective:

To get acquainted with the internals of the System logic circuits and to know the working principles of the computers.

UNIT-I [12 Hrs]

Number System: Binary number system - The Basic Gates - Boolean Algebra - Universal Gates - Boolean Laws and Theorem – Number system and its conversations.

UNIT-II [12 Hrs]

Simplification: Sum of products - Product of Sums - K-map simplifications - Don't care conditions-Quine Mcclausky tabulation method.

UNIT-III [12 Hrs]

Combinational Arithmetic Circuits: Adders-Subtractors-full adder-subtractor-BCD Adder- ROM-PLA-Designing circuits using ROM/PLA

UNIT-IV [12 Hrs]

Combinational Logic Circuits: Multiplexers-Demultiplexers-Decoders: 1 of 16 Decoders-Encoders.

UNIT-V [12 Hrs]

Sequential Logic Circuit: Flip-Flops - Its types - RS Flip flop, JK Flip flop, D Flip flop, T and Master Slave. Counters and its types - Shift Registers and its types.

TEXT BOOKS:

1. Thomas C.Bartee Digital Computer Fundamentals- McGraw Hill Pub.
2. Malvino & Leach- Digital principles and applications –McGraw Hill Pub.
3. S.Ramalatha - Digital Computer Fundmentals
4 . M.Morris Mano -Digital Logic and Computer Design- -PHI

SEMESTER – I   MATHEMATICAL FOUNDATIONS   AMTCA101

UNIT –I
Logic Operators: Conjunction, disjunction, negation, conditional and bi-conditional operators. Converse, inverse, contra-positive, logically equivalent, tautology and contradiction, arguments and validity of arguments.
Chapter 1(Pages from 1.1 to 1.50)
UNIT-II
Set theory, Relations and Functions.
Chapter2(Pages from 2.1 to 2.38)
Chapter 3(Pages from 3.1 to 3.25)
Chapter 4(Pages from 4.1 to 4.35)
UNIT –III:
Binary operations, Permutations and Combinations, Mathematical induction, Simple problems.
Chapter 6(Pages from 6.1 to 6.10)
Chapter71(Pages from 7.1 to 7.53)
UNIT –IV:
MATRICES: Types of matrices, operations on matrices, simple problems, singular and non-singular matrices, adjoint of a matrix, inverse of a matrix,symmetric and skew-symmetric, Hermitian and skew-Hermitian, orthogonal and unitary matrices, rank of a matrix.
Consistency of a system of linear equations by
  i)   Cramer's rule
  ii)   Matrix inversion method.
  iii)   Rank method.
Chapter 8(Pages from 8.1 to 8.97)
UNIT –V:
MATRIX CONTINUED: Characteristic roots and characteristic vectors, and problems on Cayley-Hamilton theorem.
APPLICATION OF MATRICES: Matrix of linear transformation: Reflection about   x axis, y axis, the line y = x, and the line y = -x, rotation about the origin through an   angle θ, expression and compression, shears, translation, successive transformation.
Chapter 8(Pages from 8.971 to 8.140)
Chapter 9(Pages from 9.1 to 9.7)

Text Books:
1. Mathematical Foundations, P.R.Vittal, Margham Publications, Chennai.
2. Discrete Mathematics, B.S. Vatssa, Wishwa Prakashan

Book for Reference:
1. Discrete Mathematics, Second edition, Seymour Lipschutz & Marc Lipson, Schaum's outlines, Tata McGraw-Hill.

SEMESTER – I   VALUE EDUCATION   VE101

Unit I

Values-Definition- Concept -Sources of values-Characteristics of values-Classification of values-Importance of value education-Erosion of values-Political erosion-social erosion-economic erosion.

Unit II

Personal values-Importance- Self concept-Meaning-the existential self- the categorical self- self - image- Ideal self- Attitude-Meaning-Formations-Factors determining attitude-Need for positive attitude-Developing positive attitude-Consequences of negative attitude.

Unit III

Adjustment problems- Emotional and sexual adjustments-Significance of youth period- Autonomy versus dependence -Feeling of inferiority- Marriage and family-Identity of roles- Vocational problems - Social discrimination- stress coping skills.

Unit IV

Social values-Meaning-Importance-Types-Social sensitiveness-Altruism-Toleration-Social adjustment- Social loyalty-Social justice-Panchsheel of values-Other social values-Family values- Value of team work-Functions of family-Moral values-Importance of moral values.

Unit V

Cultural values-Meaning-Importance -Religious values-Characteristics of religious values- significance of religious education- Secular values-mutual understanding – Mutual cooperation- Tolerance- Appreciation of universal truths- Character-Humanitarianism.

Text Books;
1. RATCHAGAR .I (2010) mental health of rural youth.vijay Nicole imprints private limited, Chennai.
2. RATCHAGAR .I (2012) Value education, personality enrichment& soft skills. Vijay Nicole imprints private limited, Chennai.

References;
1. Beliefs Attitudes and Values by Milton Rokeach (1968)
2. The Nature of Human Values by Milton Rokeach (Aug 1973)
3. Understanding Human Values by Milton Rokeach (Jul 1, 2000)
4. The Three Christs of Ypsilanti (New York Review Books Classics) by Milton Rokeach and Rick Moody (Apr 19, 2011)
5. Understanding Human Values by Milton Rokeach (Jul 1, 2001)
6. Health And Human Values by Frank Harron, (1983)

SEM – I PRACTICAL - PROGRAMMING IN C CAP101T

Objective:
To Make the students skilled in programming and to make them Logically efficient and marketable in the Programming Industry.

1. Write a C program to find the odd or even numbers for the range of given number.
2. Write a C program to find the sum of series
3. Write a C program to generate the Fibonacci series
4. Write a C program to check whether the given year is leap year or not.
5. Write a C program to reverse a given number.
6. Write a C program to find the given number is Armstrong or not.
7. Write a C program to display the following output
    (a) *
        * *
        ***
    (b) 1
        1 2
        1 2 3
    (c) 1
        2 2
        3 3 3
    (d) 3 3 3
        2 2
        1
8. Write a C program to find the largest number among the three numbers.
9. Write a C program to find whether the person is eligible to vote or not
10. Write a C program to display the grade of the student by using conditional statement
11. Write a C program to display the arithmetic manipulation using Switch statement
12. Write a C program to find out the Factorial with and without using recursive function.
13. Write a C program to add a 2 numbers by using all functions.
14. Write a C program to swap 2 numbers without using the temporary variables.
15. Write a C program to find the length of the string with and without using string function
16. Write a C program to check whether the given string is Palindrome or not
17. Write a c program for the following matrices
        (a) Addition Matrix (3X3)
        (b) Subtraction Matrix (2X2)

          (c) Multiplication Matrix (2X2)

          (d) Transpose Matrix (3X3)

18. Write a C program to generate the numbers in ascending order.

19. Write a C program to display the name ,age ,mark, average and total for the 5 students

     By structure using array.

20. Write a C program to swap 2 numbers using pointer.

பருவம்: இரண்டாம் பருவம்   பாடக் குறியீட்டு எண்: **LTC 202S**

அலகு	பாடங்கள்

1   புறநானூறு – 74,192,312
     அகநானூறு – 34,02,07
     குறுந்தொகை – 23,30,40
     நற்றிணை – 149,60,110

2   பட்டினப்பாலை (120-192)
     சிறுபாணாற்றுப்படை
     மதுரைக்காஞ்சி
     முல்லைப்பாட்டு

3   திருக்குறள்
     வினை செயல்வகை
     பொருள் செயல்வகை
     தெரிந்து செயல்வகை

          (இலக்கிய வரலாறு)

4   எட்டுத்தொகை,
     பத்துப்பாட்டு
     ஆற்றுப்படைகள்
     திருக்குறள் கீழ்க்கணக்கில் பெறுமிடம்

          (மொழித்திறன்)

5   விண்ணப்பங்கள்
     கடிதங்கள்
     சுருக்கி வரைதல்
     செய்திச் சேகரிப்பு
     நேர்காணல்

SEMESTER – II   FOUNDATION COURSE – ENGLISH – II   LEC202S

UNIT- I   **[13 HRS]**
PROSE
The Ant and the Grasshopper – W.B. Maugham
Engine Trouble – R.K. Narayan
Concerning Dates – E.V. Lucas

UNIT-II   **[13 HRS]**
ONE ACT PLAYS
Chandalika – Rabindranath Tagore

The Merchant of Venice (The Trial Scene) – William Shakespeare.

UNIT-III   **[13 HRS]**
BUSINESS WRITING
Standard Business Letters
Answering Enquiries.
Handling Letters of Complaint.
Drafting E-mail for Business Correspondence.
Intra-organizational communication.
Delayed payments and Delivery of goods.
Writing short reports.
Technical Writing.
Intranet and Internet for Business writing.

UNIT-IV   **[12 HRS]**
BUSINESS TRANSACTIONS OVER TELEPHONE
Telephone manners in Business situations.
Handling customer Orders and Enquiries.
Making Appointments.
Cancelling or Postponing appointments.
Handling Complaint Calls.
Handling Delivery and After-sales problems.
Asking for and Giving information.
Giving online help to customers for trouble shooting.
Explaining how to operate Equipment.
Taking part in Teleconferences.
Tele-Interviews.

UNIT-V   [12 HRS]
JOBS AND CAREERS
Applying for jobs; Preparing Resumes.
Writing Cover Letters for Resumes.
Preparing for Interviews.
Taking Interviews.
Post-Interview Follow- up
Promotion Interviews.

UNIT-VI
WRITTEN COMMUNICATION SKILLS   [12 HRS]
Dialogue Writing

Letter writing(Formal & Informal)

Text
1. Samson, T., and Geetha Rajeevan. **Interface-2**. Chennai: Foundation Books, 2008.
2. Bhatnagar, R.P., and Rajul Bhargava. **English for Competitive Examinations**. Chennai: Macmillan India Press, 2002.

Reference
1. Prince, Donna. **Skills for Success**, New York: CUP 1998.
2. Wallace, Michael, J. **Study Skills in English**. Kottayam: CUP, 2004.
3. Tripathy, Byot, K. **Harmony: An Anthology of Poems**. New Delhi: OUP, 1981.
4. Dahia, S.P.S., **Vision in Verse: An Anthology of Poems**. New Delhi: OUP, 1998.

SEM – II   Object Oriented Programming using C++   CA203T

UNIT-I   **[15 Hrs]**
Principles of Object Oriented Programming(OOP): Evolution of C++ - Programming Paradigms – Key Concepts of OOP – Advantages of OOP – Usage of OOP and C++.

UNIT-II   **[15 Hrs]**
C++ fundamentals: Input and Output in C++ - Streams-Stream classes Unformatted console I/O operations-Member functions of istream class-manipulators-manipulators with parameters Introduction to C++; Tokens, Keywords, Identifiers, Variables, Operators,

UNIT-III   **[15 Hrs]**
Functions and polymorphism: Expressions and Control Structures in C++; Pointers and arrays – Functions in C++ - Main Function – Function Prototyp0ing – Parameters Passing in Functions – Values Return by Functions – inline Functions – Function Overloading.

UNIT-IV   **[15 Hrs]**
Inheritance: Classes and Objects: Constructors and Destructors; and Operator Overloading and Type Conversions – Type of Constructors – Inheritance: Single Inheritance – Multilevel inheritance – Multiple inheritance – Hierarchical Inheritance – Hybrid Inheritance. Pointers, Virtual Functions and Polymorphism

UNIT-V   **[15 Hrs]**
Working with Files: Classes for File Stream Operations – Opening and Closing a File – End-of-File Detection – File Pointers – Updating a File – Error Handling during File Operations – Command-line Arguments.

TEXT BOOKS
1.   E.Balagurusamy-Object Oriented Programming with C++.TMH-1995
2.   H.Schildt,C++: The Complete Reference,TMH-1998
3.   Robert Lafore, Object Oriented Programming in Microsoft C++, Galgotia Publication.
4.   Ashok N.Kamthane, Object Oriented Programming with ANSI & Turbo C++, Pearson Education, 2006.

SEM – II   FUNDAMENTALS OF DATA STRUCTURES   CA204S

UNIT-I   **[12 Hrs]**
Introduction: Definition of a Data structure – primitive and composite Data Types, Arrays, Operations on Array, Ordered lists.

UNIT-II   **[12 Hrs]**
Stacks and Queues: Stacks – Applications of Stack – Infix to Postfix Conversion, Recursion, Maze Problems – Queues – Operations on Queues-Queue Applications- Circular Queue.

UNIT-III   **[12 Hrs]**
Linked List: Singly Linked List – Operations, Application – Representation of a Polynomial, Polynomial Addition; Doubly Linked List – Operations, Applications – Ordering Books in a Library(Alphabetical Ordering)

UNIT-IV: **[12 Hrs]**
Trees: Binary Trees –Representation- Conversion of Forest to Binary Tree– Tree Traversals

UNIT-V: **[12 Hrs]**
Graph: Definition, Types of Graphs, Representation -Graph   Traversal - Shortest Path (Dijkstra's Algorithm.)

TEXT BOOKS
1. E.Horowitz and S.Shani Fundamentals of Data Structures in C++, Galgotia   Pub.1999.
2. R.Kruse and N.Dale and S.C.Lily Pascal plus Data Structures Algorithms and
   Advanced Programming –Tata McGraw Hill-New Delhi(1990)

SEMESTER – II   STATISTICAL METHODS   ASCA202T

UNIT – I

Measures of Central tendency: Arithmetic Mean, Median, Mode, Harmonic Mean and Geometric Mean. Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation and Coefficient of Variation.

UNIT – II

Measures of Skewness: Karl Pearson's coefficient of Skewness, Bowley's coefficient of Skewness and Kelly's coefficient of Skewness. Kurtosis

UNIT – III

Correlation analysis: Karl Pearson's coefficient of correlation, Spearman's rank correlation coefficients. Regression analysis: Simple regression equations.

UNIT – IV

Tests of Significance (small samples) based on t, F distributions with respect of Mean, Variance and Correlation coefficient. Testing of Significance based on Chi-Square test: Test for Independence of attributes.

UNIT –V

Test of Significance (large samples) based on Population Proportion, Mean, Variance and Correlation coefficient.

Text Books:
1. "Statistical Methods" (32nd edition - 2004), Gupta. S. P., Sultan Chand & Sons, New Delhi.
2. "Fundamentals of Mathematical Statistics" (11th edition – 2002), Gupta. S. C. and Kapoor. V. K., Sultan Chand & Sons, New Delhi.

Reference Books:
1. "Fundamentals of Applied Statistics" (2nd edition – 1978), Gupta. S. C. and Kapoor. V. K., Sultan Chand & Sons, New Delhi.
2. "Statistics (Theory and Practice)" (3rd edition - 1993), Pillai. R. S. N. and Bagavathi. V. Sultan Chand & Sons, New Delhi.
3. "Fundamentals of Statistics – Volume II" (6th edition - 1990), Goon. A. M., Gupta. M. K. and Dass Gupta. B, The World Press Private Ltd., Calcutta.
4. "Business Statistics" (1st edition – 2008), Bharat Jhunjhunwala, S. Chand & Company Ltd.
5. "Mathematical Statistics" (1st edition – 2002), Vittal. P. R., Margham Publications, Chennai – 17

பருவம் : இரண்டாம் பருவம்   பாடக் குறியீட்டு எண் : **EBT 201**

அலகு − 1

எளிய முறையில் தமிழ் கற்றல்.

1. பட்டம் − சட்டம் − கட்டம் − தட்டு − வட்டம் − மாமா
2. பாடம் − சட்டி − கட்டி − தட்டி − வடம் − மாமி
3. பட்டி − சடை − கடை − தடை − வடை − மாதா
4. படி − சாதம் - கார் - தார் - வான் - மாதம்
5. படை − சாவி − காவி − தாள் - வான் - அம்மா − அப்பா
6. பாப்பா −
7. பாட்டி −
8. பாட்டு −

சிறு தொடர்.

பாப்பா படி − பாட்டி கடை − கட்டடம் கட்டித்தா −
பாப்பா பாடம்படி − பாட்டி தட்டு −
பாப்பா பாட்டு படி − பாட்டி வடைத்தட்டு

பயிற்சி.

குடும்பத்தினர் (அ) நண்பருடன் பேச்சுத் தமிழில் உரையாடல்
குறில் நெடில் வேறுபாட்டால் பொருள் மாறுபடும் சொற்கள்
பரம் − பாரம் கரம் − காரம் வரம் − வாரம் சரம் − சாரம்
தரம் − தாரம்

அலகு − 2

உயிரெழுத்துக்கள், ஆய்த எழுத்து, மெய்யெழுத்துக்கள் - வகை, எண்ணிக்கையுடன் அறிதல்.

உயிர்மெய் எழுத்துகள் உருவாதலைக் கற்றல்:
(வல்லின மெய்கள்)
க் + அ − க .... ற் + ஒள − றெள
K + A – KA .... RR + OU - RROU

அலகு − 3

உயிர்மெய் எழுத்துகள் மெல்லினம், இடையினம்
ங் + அ = ங .... ன் + ஒள − னௌ
NG + A – NGA .... N + OU – NOU

ய் + அ = ய .... ள் + ஒள − ளௌ
Y + A – YA .... LL + OU - LLOU

ஒலி வேறுபாட்டால் பொருள் மாற்றம் (ர-ற, ன-ண, ல-ள, ழ)
அரம் - அறம்
உன் - உண்
வால் - வாள் - வாழ்

ஒவ்வொன்றிற்கும் ஐந்து எடுத்துக்காட்டு தருக.

அலகு – 4

சொல்-வகை

ஒரெழுத்து ஒருமொழி

பெயர்:

ஆ, பூ, தீ, தை, கா (சோலை)

வினை:

வா, போ, ஈ (கொடு)

தா, கா (காத்தால்)

ஈரெழுத்து ஒருமொழி:

பெயர்:

கனி, பனி, வான், காடு, வீடு

வினை:

நில், படி, பார், காண், எழு

தொடர்மொழி: பெயர்:

கபிலர், வெள்ளிவீதியார், திருவள்ளுவர், ஆண்டாள், கம்பர், பாரதியார்

முக்கனி, முத்தமிழ், மூவேந்தர், நாற்றிசை, ஐம்பொறி - இவற்றிற்கு விளக்கம் தருக.

முறைப்பெயர் (உறவுப்பெயர்) அம்மா, அப்பா, மாமா, ...

அலகு – 5

உடலுறுப்புப் பெயர்கள்:

தலை முதல் அடி வரை உள்ள உறுப்புகள்

முதலெழுத்து மாற்றத்தால் பொருள் மாற்றம் பெறும் உடலுறுப்புகள் சான்றாக:

உதயம் – இதயம்	ஊக்கு – மூக்கு
பண், மண் – கண்	படி – அடி
மரம், வரம் – கால்	கல் – பல்
ஆல், பால் – கால்	கொடை – தொடை
அலை, இலை – தலை	மாது – காது
பாக்கு, வாக்கு – நாக்கு	கிழி – விழி
எழுத்து – கழுத்து	

பறவைப் பெயர்கள்:

மயில், அன்னம், கிளி, புறா, குயில்

வீட்டு விலங்குகள்:

பசு, ஆடு, குதிரை, நாய், பூனை

மலர்கள்:

தாமரை, மல்லிகை, முல்லை, செண்பகம், அல்லி

நிறங்கள்:

வானவில்லின் வண்ணங்கள் - அறிதல்

எண்கள்:

ஒன்று முதல் ஐம்பது வரை எழுத்தால் எழுதுதல்

சிறுகதை:

"புலியை ஏமாற்றிய நரி" தமிழ் - நான்காம் வகுப்பு, தமிழ் நாட்டுப் பாடநூல் கழகம், சென்னை.

SEMESTER – II PERSONALITY DEVELOPMENT   EPD201

Unit I

Personality

Meaning-definition-major determinants of personality genetic determinants, social determinants, cultural determinants, psychological determinants, theories Jung's typology trait theory psychoanalytical theory importance of personality development guidance to improve personality.

Unit II

Mental health

Meaning-concept-definition-characteristics - influential factors - biological factors - psychological factors - socio-economic and cultural factors

Unit III

Stress and its management

Meaning,definition causes of stress, major life changes and environmental events - conquence of stress,stress manangement techniques.

Unit IV

Part-a

Anger and its manangement;

Meaning, definition, nature-causes-symtoms and consequence of anger - physiological effects and psychological effects ,techniques to control anger.

Part-b

Suicidal prevention

Unit V

Soft skills development - Presentation skill - Interpersonal skill - Body language

Text Book;

Mental health of rural youth

Reference;

Personality development-Elizabeth .B.Hurlock

SEM – II   OBJECT ORIENTED PROGRAMMING IN C++ PRACTICAL   CAP202T

Objective:
To implement all object oriented programming Concepts.

1. Program using Classes and Objects
2. Program using Constructor and destructor
3. Program using Function overloading and Inline functions
4. Program using Operator Overloading
5. Program using Inheritance
6. Program using friend functions

Programs using Data Structure Concepts

7. Implement PUSH, POP Operators of Stack using Arrays.
8. Implement add, delete Operators of a queue using Arrays.
9. Conversion of infix to postfix using stack Operations.
10. Binary tree traversals using recursion
11. **To implement simple Linked List concept.**

SEMESTER – III Programming using Sun Micros Tech-Java CA305Q

UNIT – I   **[18 Hrs]**
Introduction to Java: Features of Java – Data Types – Variables – Arrays – Operators - Control Statements.

UNIT – II   **[18 Hrs]**
Classes and Objects: Constructors –Inheritance- Overloading method– Overriding methods – Using super – Abstract class.

UNIT – III   **[18 Hrs]**
Packages and Interfaces: Packages-Creating Packages –Importing Packages–Interfaces. **Exception Handling:** Try, Catch, Throws, Throw and Finally.

UNIT –IV   **[18 Hrs]**
Thread: Introduction to Thread-Multithread-implementation of multithread application using synchronization.
Streams: Simple Input Streams-Simple Output Streams – File Streams-

UNIT – V   **[18 Hrs]**
Strings: String classes-String Buffer classes.
Predefined Classes: Vector class, Random class, Calendar class, Date Class.

TEXT BOOKS:
1. Cray S. Horstman, Gray Cornell – Core Java 2 Vol. I and Vol. II – 7th Ed. PHI, 2000.
2. H. Schildt – Java2 (The Complete Reference] – Fourth Edition, TMH 1999.

REFERENCE BOOK:
Wesley, K. Arnold and J. Gosling – The Java Programming Language – Third Edition Addison – Wesley, 2000.

SEMESTER– III   COMPUTER GRAPHICS CA306S

UNIT –I

Introduction to computer Graphics: Video display devices – Raster scan system – Random Scan System – Interactive input Devices – Hard copy devices – Graphics software – Output primitives – line drawing algorithms – initializing lines – Line function – circle Generating algorithms.

UNIT – II

Output Primitives: Attributes of output Primitives – line attributes – Color and Grayscale style – Area filing algorithms – Character attributes Inquiry functions – Two dimensional transformations – Basic transformation – composite transformation – Matrix representation –Other transformations.

UNIT – III

2D Concepts: Two – dimensional viewing – window – to view port co-ordinate transformation – clipping algorithms – interactive input methods – Physical Input devices – logical classification of input devices – interactive picture construction methods.

UNIT- IV

3D Concepts: Three – dimensional concepts – Three dimensional display methods – parallel Projection –Perspective projection – Depth Cueing – Visible line and surface identification.

UNIT – V

Transformations: Three dimensional transformations -Three dimensional viewing – Projection – Viewing transformation – implementation of viewing operations.

TEXT BOOK:
1. D. Hearn and M.P. Basker – Computer Graphics [C Version] – Person Education.

REFERENCE BOOK:
1. W.M. Newman and RF. Sproull – Principle of Interactive Computer Graphics – McGraw Hill International Edition -1979.

SEMESTER III   FINANCIAL ACCOUNTING ACMCA301

Unit I INTRODUCTION TO ACCOUNTING   [15Hrs]
Accounting - meaning,need for Accounting, definition and scope of Accounting. Book Keeping and Accounting – Objectives of Accounting –Advantages and limitations of accounting - Branches of Accounting – Methods of Accounting – Types of accounts – Accounting rules – Accounting concepts and conventions. (Theory Questions only)

Unit IIJOURNAL AND LEDGER   [10 Hrs]
Introduction - Journal –Meaning - Ledger – Meaning – Difference between journal and ledger – Subsidiary books – benefits of subsidiary books – preparation of individual subsidiary books – purchase – sales – purchase returns – sales returns – cash book – single column – two column – three column cash book .

Unit III TRIAL BALANCE AND FINAL ACCOUNTS OF SOLE TRADER   [15Hrs]
Trial balance – introduction, meaning, definition, objectives, errors not disclosed by trial balance and errors disclosed by trial balance.Final Accounts – introduction – preparation of manufacturing account, trading account, profit and loss account andbalance sheet – Adjustments (Simple).

Unit IVDEPRECIATION ACCOUNTING   [25Hrs]
Depreciation – introduction,meaning, causes,factors affecting the amount of depreciation. Methods of providing Depreciation – Straight line method and Diminishing balance methods only.

Unit V SINGLE ENTRY SYSTEM   [10 Hrs]
Single entry system – introduction, meaning, definition, salient features and limitations.Difference between single entry and double entry system- Ascertainment of profit – net worth method – Difference between balance sheet and statement of affairs- conversion method.

TEXT BOOKS:-
1. Financial Accounting, T.S. Reddy&Murth, Margham Publications, Chennai-5, 2007
2. Financial Accounting R. L. Gupta & V. K. Gupta, Sultan Chand, New Delhi, 2005.

REFERENCE BOOKS:

1. Advance accountancy – I, M. C. Skukla& T. S. Grewal, Sultan Chand & Sons, New Delhi, 2005.
2. Advance Accountancy – I, Jain &NArang, Kalyani Publications, New Delhi, 2003
3. Advanced Accountancy – I, Arulandam& Raman, Himalaya Publications, New Delhi, 2003
4. Financial Accounting, P. C. Thulsian, Tata McGraw Hill, New Delhi, 2005
5. www.icai.org (1st Unit)
6. Indian accounting standards R.L.Gupta&M.Radhaswamy Sultan Chand

SEMESTER – III   NUMERICAL METHODS   AMTCA302

UNIT- I: FINITE DIFFERENCES
First and higher order differences-forward differences and Back ward differences-Properties of operators-Differences of a Polynomial-Factorial Polynomials – Operator E, Relation between Δ, ∇ and E – Interpolation – Newton – Gregory forward & backward formulae for interpolation.

UNIT-II: CENTRAL DIFFERENCES
Central difference Operators – Central differences formulae: Gauss Forward and Backward formulae – Sterling's formula – Bessel's formula.

UNIT – III: INTERPOLATING FOR UNEQUAL INTERVALS AND INVERSE INTERPOLATION
Divided differences – Newton's divided differences formula and Lagrange's formula – Estimating the Missing terms [with one or more missing values] - Lagrange's method and Reversion of series method [Using Newton's forward formula only]..

UNIT – IV: SOLUTION OF SIMULTANEOUS EQUATION
Gauss elimination method – matrix inversion method – Gauss – Jordan Method, Gauss – Seidal method – Crout's method [Three unknowns only].

UNIT – V: SOLUTION OF DIFFERENTIAL EQUATION
Solving second order differential equation, Rung kutta metod, Euler's modified method, Euler's method, Adam's method.

Text Books:
1.   A.Singaravelu [2004]. Numerical Methods Meenakshi Agency, Chennai
2. M.K.Venkataraman.(1992) Numerical methods for Science and Engineering National Publishing Company., Chennai.

Reference Books :

1. S.Arumugham.[2003] Numerical Methods, New Gamma Publishing, Palamkottai.
2. H.C.Saxena.[1991] Finite differences and Numerical analysis S.Chand & Co. Delhi
3. B.D.Gupta.(2001) Numerical Analysis, Konark Pub. Ltd., Delhi
4. P.Kandasamy, K.Thilagavathy [2003] Calculus of Finite difference & Numerical Analysis, S.Chand & Company Ltd., New Delhi-55.

SEMESTER– III   Programming using Sun Micros Tech-Java –PRACTICAL   CAP303Q

1. Finding area and Perimeter of a circle. Use Buffered Reader class.

2. Determining the order of numbers generated randomly using Random class.

3. Implementing and importing packages for simple application.

4. Implementing Interfaces-Arithmetic Manipulations.

5. Exception Handling.

6. Multithreading.

7. String Manipulation using String/StringBuffer class.

8. Usage of Calendar Class and manipulation

9. Application using File streams(Sequential File)

10. Application using File Streams(Random File)

SEMESTER – III   ENVIRONMENTAL STUDIES   EVS301

Unit I : Environmental studies and Natural resources   (20 Hrs)

Definition, scope and importance of environmental studies – forest resources: deforestation, mining, dams – water resources: over – utilization, floods, drought – mineral resources: exdploitation, extraction and usage – food resources: food problems, overgrazing, pesticide problems, water logging, salinity – energy resources: energy needs, renewable and non renewable energy – land resources: land degradation, landslides, soil erosion and desertification – conserving natural resources.

Unit II: Ecosystems :   (20 Hrs)

Concept, structure and function of an ecosystem – producers, consumers and decomposers – energy flow – ecological succession – food chains, food webs and ecological pyramids – types, characteristics, structure and function of forest ecosystem, grassland ecosystem, desert ecosystem and aquatic ecosystem –

Unit III: Biodiversity: (20 Hrs)

Definition of biodiversity – genetic, species and ecosystem diversity – value of biodiversity – India as a mega diversity nation – hot spots – threats to biodiversity – endangered and endemic species of India – In-situ and Ex-situ conservation of biodiversity.

Unit IV: Environmental Pollution: (20 Hrs)

Cause, effects and control measures of air pollution, water pollution, soil pollution, marine pollution, noise pollution, thermal pollution and nuclear hazards – solid waste management: causes, effects, control measures and disposal of wastes – disaster management: floods, earthquakes, cyclone, land slides and tsunami.

Unit V: Social Issues, Human population and the Environment: (20 Hrs)

Water conservation, rain water harvesting, watershed management – environmental ethics: issues and possible solution – climate change, global warming, acid rain, ozone depletion, nuclear accidents and holocaust – wasteland reclamation – Environment protection Act – Wildlife protection Act – Forest Conservation Act – public awareness – Population explosion – Environment and human health – Role of Information Technology in Environment and human health.

Field work: (20 Hrs)
1. Visit to a local area to document environmental assets – river / forest / grassland/mangrove.
2. Visit to a local polluted site – urban / rural / industrial / agricultural.
3. Study of common plants, insects, birds.
4. Study of simple ecosystems – pond, river, forest, etc.,
5. Practical work

Reference Books:

1. Joseph C.Daniel,2004. Principles of Environmental Science. Brightson's Publications,Chennai.
2. Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.

3. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad - 380 013, India, Email:mapin@icenet.net

4. Jadhav, H & Bhosale, V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi

5. Miller T.G. Jr. Environmental Science, Wadsworth Publishing Co.

6. Odum, E.P. 1971. Fundamentals of Ecology. W.B. Saunders Co. USA,

7. Sharma B.K., 2001. Environmental Chemistry. Geol Publ. House, Meerut
8. Trivedi R.K., Hand book of Environmental Laws, Rules Guidelines, Compliances and   Standards. Vol I and II, Enviro Media9.Wanger K.D., 1998. Environmental Management. W.B. Saunders Co. Philadelphia, USA