

பருவம்: முதற் பருவம்

பாடக் குறியீட்டு எண்: LTC 101T

அலகு

பாடங்கள்

1. மரபு கவிதையும், புதுக்கவிதையும்
  - 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
2. காப்பியங்கள். சமயப்பாடல்கள், சிற்றிலக்கியம்
  - 2.1 சிலப்பதிகாரம் - அடைக்கலக் காதை
  - 2.2 மணிமேகலை – சக்கரவாளக் கோட்டம்
  - 2.3 கம்பராமாயணம் - வாலிவதைப் படலம்
  - 2.4 மாணிக்கவாசகர் - திருக்கோத்தும்பீ
  - 2.5 தாயுமானவர் - பராபரக் கண்ணி
  - 2.6 குற்றாலக் குறவஞ்சி
3. சிறுகதைகள்
  - 3.1 இந்துமதி – குருத்து
  - 3.2 விநாயக மூர்த்தி – பரிசு
  - 3.3 அறிஞர் அண்ணா – செவ்வாழை
4. உரைநடை - மு.வ. – நல்வாழ்வு – பண்பாடு, பொதுமை ஓர் அறம், நீந்துக
5. இலக்கணம் அணி
  - 5.1 உவமை அணி
  - 5.2 எடுத்துக்காட்டு உவமை அணி
  - 5.3 சொல் பொருள் பின்வரு நிலை அணி
  - 5.4 தற்குறிப்பேற்ற அணி
  - 5.5 வல்லொற்று மிகும் இடம், மிகா இடம்

## 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** [15 HRS]**WRITTEN COMMUNICATION SKILLS**

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, **Selected College 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.Gottfried - 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 - Design of ALU.

**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 Fundamentals
- 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  $\theta$ , 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. Vatsa, 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**

1. Pascal triangle
2. Generation of prime numbers between two given numbers
3. Tower of Hanoi using recursion
4. Calculation of GCD using recursion
5. String Reverse
6. Palindrome checking
7. Matrix Addition
8. Matrix Multiplication
9. Matrix Transpose
10. Linear Search
11. Binary Search
12. Bubble Sort
13. Insertion Sort
14. Selection Sort
15. File Processing

St. Joseph's College, Cuddalore.