CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS)

Nationally Accredited with 'A' Grade by NAAC TIRUCHIRAPPALLI

PG AND RESEARCH DEPARTMENT OF COMPUTER SCIENCE



B.Sc. COMPUTER SCIENCE SYLLABUS

2024-2025 and Onwards

CAUVERY COLLEGE FOR WOMEN (AUTONOMOUS) PG AND RESEARCH DEPARTMENT OF COMPUTER SCIENCE

VISION

To create an ambience for a quality academic erudition which drives technologically adept, innovative and globally competent graduates with ethical values

MISSION

- To have a breath of knowledge across the subject areas of Computer Science
- To professionally enrich the students for successful career in Academia, Industry and Research
- To promote and inculcate ethics and code of professional practice among students

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEOs	Statements
PEO1	LEARNING ENVIRONMENT To facilitate value-based holistic and comprehensive learning by integrating innovative learning practices to match the highest quality standards and train the students to be effective leaders in their chosen fields.
PEO2	ACADEMIC EXCELLENCE To provide a conducive environment to unleash their hidden talents and to nurture the spirit of critical thinking and encourage them to achievetheir goal.
PEO3	EMPLOYABILITY To equip students with the required skills in order to adapt to the changing global scenario and gain access to versatile career opportunities in multidisciplinary domains.
PEO4	PROFESSIONAL ETHICS AND SOCIAL RESPONSIBILITY To develop a sense of social responsibility by formulating ethics and equity to transform students into committed professionals with a strong attitude towards the development of the nation.
PEO5	GREEN SUSTAINABILITY To understand the impact of professional solutions in societal and environmental contexts and demonstrate the knowledge for an overall sustainable development.

PROGRAMME OUTCOMES FOR B.Sc. Computer Science,

B.Sc. Computer Science with Cognitive Systems, BCA,

B.Sc. Information Technology

DO NO	On completion of B. Sc Computer Science / B. Sc Computer Science with Cognitive
PO NO.	Systems / BCA/ B. Sc Information Technology Programme, the students will be able to
	ACADEMIC SKILLS & SOCIAL RESPONSIBILITY
PO 1	Apply Computing, Mathematical and Scientific Knowledge in Various disciplines by
	understanding the concerns of the society.
	CRITICAL THINKING AND INNOVATIVE PROGRESS
PO 2	Design the software applications with varying intricacies using programming languages
	for innovative learning in techno world to meet the changing demands.
	PERSONALITY DEVELOPMENT
PO 3	Perceive Leadership skills to accomplish a common goal with effective
	communication and understanding of professional, ethical, and social responsibilities.
	LIFELONG LEARNING
PO 4	Identify resources for professional development and apply the skills and tools
	necessary for computing practice to gain real life experiences.
	CREATIVITY AND HOLISTIC APPROACH
PO 5	Create a scientific temperament and novelties of ideas to support research and
	development in Computer Science to uphold scientific integrity and objectivity.

PROGRAMME SPECIFIC OUTCOMES FOR B.Sc. COMPUTER SCIENCE

PSO NO.	The students of B.Sc. Computer Science will be able to	POs Addressed
PSO 1	Identify, analyze, design an optimized solution using appropriate algorithms of varying complexity using cutting edge technologies	PO 1 PO 2 PO 5
PSO 2	Attain a solid foundation in the Programming languages and to formulate computational solutions to real life problems	PO 1 PO 2 PO 4 PO 5
PSO 3	Equip the skills to utilize tools and technologies in computer science to meet the industrial needs and to communicate effectively among peers	PO 3 PO 4
PSO 4	Develop skills in software and hardware so as to enable them to establish a productive career in industry, research, academia and also as an entrepreneur	PO 1 PO 4 PO 5
PSO 5	Implement independent projects of their own choice using latest tools and also work as an effective team member to attain the predefined goals.	PO 3 PO 4 PO 5



Cauvery College for Women (Autonomous), Trichy

PG & Research Department of Computer Science

B.Sc. Computer Science

LEARNING OUTCOMES BASED CURRICULUM FRAMEWORK (CBCS –LOCF) (For the Candidates admitted from the Academic year 2024-2025 and onwards)

er		Course			į.	Credits	Exam			
nest	Part		Course Title	Course Code	st .Hrs /week			Marks		Total
Semester Part		200000			Inst .Hrs. /week	\mathbf{Cr}	Hrs.	Int	Ext	
			பொதுத்தமிழ்–I	23ULT1						
			Hindi ka Samanya Gyanaur Nibandh	23ULH1		3	3	25	75	
	I	Language Course-I(LC)	Poetry, Grammar and History of Sanskrit Literature	23ULS1	6					100
			Foundation Course: Paper I – French I	23ULF1						
I	II	English Language Course -I (ELC)	General English-I	23UE1	6	3	3	25	75	100
		Core Course–I(CC)	Programming in C	24UCS1CC1	5	5	3	25	75	100
		Core Practical-I(CP)	C Programming (P)	24UCS1CC1P	3	3	3	40	60	100
	III	First Allied Course-I(AC)	Essential Mathematics	22UCS1AC1	4	3	3	25	75	100
		First Allied Course-II(AC)	Numerical Analysis and Statistics	22UCS1AC2	4	3	3	25	75	100
	IV	Ability Enhancement Compulsory Course-I (AECC)	UGC Jeevan Kaushal - Value Education	23UGVE	2	2	-	100	-	100
			Total		30	22				700

The Internal and External marks for theory and practical courses are as follows:

Course	Internal Marks	External Marks
Theory	25	75
Practical	40	60

For Theory Courses:

- a) The passing minimum for CIA shall be 40% out of 25 marks (i.e. 10 marks)
- b) The passing minimum for End Semester Examinations shall be 40% out of 75 marks (i.e. 30 marks)

For Practical Courses:

- a) The passing minimum for CIA shall be 40% out of 40 marks(i.e. 16 marks)
- b) The passing minimum for End Semester Examinations shall be 40% out of 60 marks (i.e. 24 marks)

Semester: I	Internal Mark	:: 25	External Mark: 75		
COURSE CODE	COURSE TITLE	CATEGORY	HOURS / WEEK	CREDITS	
23UIT1CC1/ 24UCS1CC1	PROGRAMMING IN C	CC	5	5	

Course Objectives

- To familiarize the students with the understanding of code organization
- To improve the programming skills
- Learning the basic programming constructs.

Course Outcomes and Cognitive Level Mapping

CO Number	Course Outcome	Cognitive Level
CO1	Outline the fundamental concepts of C programming languages, and its features	K1
CO2	Demonstrate the programming methodology	K2
CO3	Identify suitable programming constructs for problem solving	К3
CO4	Select the appropriate data representation, control structures, functions and concepts based on the problem requirement	K4
CO5	Evaluate the program performance by fixing the errors	K5

Mapping of CO with PO and PSO

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	2	2	3	2	1	2	2	2	3	2
CO2	3	2	3	2	2	3	3	2	3	2
CO3	3	3	3	2	2	3	3	2	3	3
CO4	3	2	3	2	3	2	2	2	3	3
CO5	3	3	3	2	3	3	3	2	2	3

[&]quot;1" – Slight (Low) Correlation

[&]quot;3" – Substantial (High) Correlation

[&]quot;2" – Moderate (Medium) Correlation

[&]quot;-" indicates there is no correlation.

Syllabus

UNIT	CONTENT	HOURS	COs	COGNITIVE LEVEL
I	Studying Concepts of Programming Languages- Language Evaluation Criteria - Language design - Language Categories - Implementation Methods — Programming Environments - Overview of C: History of C- Importance of C- Basic Structure of C Programs- Executing a C Program- Constants, Variables and Data types - Operators and Expressions - Managing Input and Output Operations	15	CO1 CO2 CO3 CO4 CO5	K1 K2 K3 K4 K5
II	Decision Making and Branching: Decision making with If, simple IF, IF ELSE, nested IF ELSE, ELSE IF ladder, switch, GOTO statement. Decision Making and Looping: While, Do-While, For, Jumps in loops. Arrays - Character Arrays and Strings	15	CO1 CO2 CO3 CO4 CO5	K1 K2 K3 K4 K5
III	User Defined Functions: Elements of User Defined Functions- Definition of Functions- Return Values and their Types- Function Call- Function Declaration-Categories of Functions- Nesting of Functions-Recursion	15	CO1 CO2 CO3 CO4 CO5	K1 K2 K3 K4 K5
IV	Structures and Unions: Introduction- Defining a Structure- Declaring Structure Variables Accessing Structure Members- Structure Initialization- Arrays of Structures- Arrays within Structures- Unions- Size of Structures	15	CO1 CO2 CO3 CO4 CO5	K1 K2 K3 K4 K5
V	Pointers: Understanding Pointers- Accessing the Address of a Variable- Declaring Pointer Variables- Initializing of Pointer Variables- Accessing a Variable through its Pointer- Chain of Pointers- Pointer Expressions- Pointer and Scale Factor- Pointer and Arrays- Pointers and Character Strings- Array of Pointers- Pointer as Function Arguments- Functions Returning Pointers- Pointers to Functions-Memory model-File Management in C	15	CO1 CO2 CO3 CO4 CO5	K1 K2 K3 K4 K5

VI	Self Study for Enrichment (Not included for End Semester Examinations) Algorithm- Flowchart- Develop algorithms for real time scenario- Simple expressions- Conversion programs- swapping numbers (with and without using temporary variable). Programs for checking eligibility-Triangle formation-Sum of series-Array manipulations (Sorting, searching, insert, delete and merging)-String handling programs- Dynamic memory management using pointers-Employee pay bill preparation, Student mark list using Files.	-	CO1 CO2 CO3 CO4 CO5	K1 K2 K3 K4 K5	
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Text Books

- 1. Robert W. Sebesta, (2012), —Concepts of Programming Languages∥, Fourth Edition, Addison Wesley (Unit I : Chapter − 1)
- 2. E. Balaguruswamy, (2010), —Programming in ANSI CI, Fifth Edition, Tata McGraw Hill Publications.

References

- 1. Ashok N. Kamthane, Amit Ashok Kamthane(2015). Programming in C, 3rd Edition, Pearson India Education Services Pvt. Ltd.
- 2. Byron Gottfried, (2010), —Programming with C∥, Schaums Outline Series, Tata McGraw Hill Publications

Web References

- 1. https://www.learn-c.org/
- 2. https://www.cprogramming.com/
- 3. https://www.tutorialspoint.com/cprogramming/index.html
- 4. http://www.programiz.com/c-programming
- 5. http://www.programmingsimplified.com/c-program-examples
- 6. https://archive.nptel.ac.in/courses/106/104/106104128/

Pedagogy

Chalk and Talk, PPT, Discussion, Assignment, Demo, Quiz and Seminar.

Course Designer

Dr. M. Anandhi, Associate Professor, Department of Information Technology.

Semester: I	Internal Marl	k: 40	External	Mark: 60
COURSE CODE	COURSE TITLE	CATEGORY	HOURS / WEEK	CREDITS
23UIT1CC1P/	C PROGRAMMING (P)	CP	3	3
24UCS1CC1P				

Course Objectives

- The Course aims to provide exposure to problem-solving through C programming
- It aims to train the student to the basic concepts of the C -Programming language
- Apply different concepts of C language to solve the problem

Course Outcomes and Cognitive Level Mapping

CO Number	Course Outcome	Cognitive Level
CO1	Demonstrate the understanding of syntax and semantics of C programs.	K1
CO2	Identify the problem and solve using C programming techniques.	K2
CO3	Identify suitable programming constructs for problem solving.	К3
CO4	Analyze various concepts of C language to solve the problem in an efficient way.	K4
CO5	Develop a C program for a given problem and test for its correctness.	K5

Mapping of CO with PO and PSO

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	2	2	2	3	1	2	3
CO2	3	2	3	2	3	3	2	2	2	3
CO3	3	2	2	2	2	3	3	2	3	2
CO4	3	3	2	3	2	3	3	2	3	3
CO5	3	3	3	2	3	3	3	3	2	3

[&]quot;1" – Slight (Low) Correlation
"3" – Substantial (High) Correlation

[&]quot;2" – Moderate (Medium) Correlation "-" indicates there is no correlation.

Syllabus

- 1. Programs using Input/ Output functions
- 2. Programs on conditional structures
- 3. Command Line Arguments
- 4. Programs using Arrays
- 5. String Manipulations
- 6. Programs using Functions
- 7. Recursive Functions
- 8. Programs using Pointers
- 9. Files
- 10. Programs using Structures & Unions

Text Book

1. E. Balagurusamy, Programming in ANSI C, Fifth Edition, Tata McGraw-Hill, 2010.

Reference Books

- 1. Byron Gottfried, Schaum's Outline Programming with C, Fourth Edition, Tata McGraw-Hill, 2018.
- 2. Kernighan and Ritchie, The C Programming Language, Second Edition, Prentice Hall, 1998.
- 3. Yashavant Kanetkar, Let Us C, Eighteenth Edition, BPB Publications, 2021

Web References

- 1. https://www.tutorialspoint.com/cprogramming
- 2. https://www.javatpoint.com/c-programming-language-tutorial
- 3. https://www.w3schools.in/category/c-tutorial

Course Designer

Dr. M. Anandhi, Associate Professor, Department of Information Technology.

FIRST ALLIED COURSE –I (AC) ESSENTIAL MATHEMATICS

(For B.Sc Computer Science, B.Sc Information Technology & BCA)

(2022-2023 and Onwards)

Semester I	Internal	External Marks:75		
COURSE CODE	COURSE TITLE	CATEGORY	Hrs/Week	CREDITS
22UCS1AC1/ 22UCA1AC1/ 22UIT1AC1	ESSENTIAL MATHEMATICS	ALLIED	4	3

Course Objective

- Apply the basic concepts of Differentiation, Integration and their applications.
- Compute mathematical quantities using ordinary and partial differential equations.
- **Explore** fundamental concepts in graph theory.

Course Outcomes

Course Outcome and Cognitive Level Mapping

CO	CO Statement	Cognitive
Number	On the successful completion of the course, students will be able to	Level
CO1	Remember and recall the basic concept of essential mathematics.	K1
CO2	Illustrate the various notions in the respective streams .	K2
CO3	Apply the different terminologies of essential mathematics.	К3
CO4	Classify the solution of mathematical problems using various techniques.	K4
CO5	Examine the solution of mathematical problems.	K4

Mapping of CO with PO and PSO

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	2	3	3	3	3	3	3	2	3
CO2	3	3	3	3	3	3	3	3	3	2
CO3	3	2	3	3	3	3	3	3	2	2
CO4	3	2	2	3	3	3	3	3	3	2
CO5	3	2	3	3	3	3	3	3	2	2

[&]quot;1" – Slight (Low) Correlation

[&]quot;3" – Substantial (High) Correlation

[&]quot;2" – Moderate (Medium) Correlation

[&]quot;-" indicates there is no correlation.

Syllabus

UNIT	CONTENT	HOURS	COs	COGNITIV ELEVEL
I	Matrices Matrix – Special types of matrices – Scalar multiplication of a matrix – Equality of matrices – Addition of matrices – Subtraction – Multiplication of Matrices – Inverse matrix – Relation between adjoint and inverse matrices – Solution of simultaneous equations – Rank of a matrix – A system of <i>m</i> homogeneous linear equations in <i>n</i> unknowns – System of non-homogeneous linear equations – Eigen values and Eigenvectors – Similar matrices – Cayley-Hamilton Theorem (proof not needed) – Simple applications only	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
II	Differentiation Maxima and Minima (Problems Only) –Points of inflexion. Partial differentiation Functions of function rule – Total Differential Coefficient – A Special case – Implicit Functions – Homogeneous functions – Euler's Theorem (proof not needed) – Simple problems only.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
III	Integration Integration of Rational algebraic functions – Rule (a) – Rule (b): Type i: $\int \frac{dx}{ax^2 + bx + c}$. Type ii: $\int \frac{lx + m}{ax^2 + bx + c} dx$ – Integration of Irrational functions : Case (ii) Integration of the form $\int \frac{px + q}{\sqrt{ax^2 + bx + c}}$ – Type $\int \frac{dx}{a + bcosx}$ – Properties of definite integrals.	12	CO1, CO2, CO3, CO4,	K1, K2, K3, K4
IV	Differential Equations Linear Differential Equation with constant coefficients – The Operators D and D^{-1} – Particular Integral – Special methods of finding P.I.: X is of the form (a) e^{ax} (b) $cosax$ or $sinax$, where α is a constant (c) x^m (a power of x), m being a positive integer $(d) e^{ax}V$, where V is any function of x .	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
V	Graph Theory Introduction — Definition of Graphs — Applications of Graphs — Finite and infinite graphs — Incidence and Degree — Isolated Vertex, Pendant Vertex and Null Graph. Path and Circuits Isomorphism — Subgraphs — Walks, Paths and Circuits — Connected Graphs, Disconnected Graphs and Components — Euler graphs.	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
VI	Self-Study for Enrichment (Not included for End Semester Examination) Symmetric matrix – Skew symmetric matrix – Hermitian and skew Hermitian matrices Concavity and Convexity– Integration by parts – Linear equation – Hamiltonian Paths and Circuits.	-	CO1, CO2, CO3, CO4,	K1, K2, K3, K4

Text Books

- 1. T.K.Manicavachagom Pillay, T.Natarajan, K.S.Ganapathy.(2015). *Algebra, Volume II.* S. Viswanathan (Printers & Publishers) Pvt., Ltd.
- 2. S.Narayanan, T.K.Manicavachagom Pillay.(2015). *Calculus, Volume I.* S. Viswanathan (Printers & Publishers) Pvt., Ltd.
- 3. S.Narayanan, T.K.Manicavachagom Pillay.(2015). *Calculus, Volume II*. S. Viswanathan (Printers & Publishers) Pvt., Ltd.
- 4. S.Narayanan, T.K.Manicavachagom Pillay.(2015). *Calculus, Volume III*. S. Viswanathan(Printers & Publishers) Pvt., Ltd.
- 5. Narsingh Deo. (2003). *Graph Theory with applications to Engineering and Computer*. Prentice Hall of India Private Limited

UNIT-I Chapter 2: Section 1 to 5, 7, 8, 10 to 16[1]

UNIT-II Chapter V: Section 1.1 to 1.5[2]

Chapter VIII: Section 1.2 to 1.6[2]

UNIT-III Chapter 1: Section 7.1 to 7.3, 8 (CASE II), 9, 11[3]

UNIT-IV Chapter 2: Section 1 to 4[4]

UNIT-V Chapter 1: Section 1.1 to 1.5[5]

Chapter 2: Section 2.1, 2.2, 2.4 to 2.6[5]

Reference Books

- 1. A.Singaravelu. (2003). Allied Mathematics. A.R.Publications
- 2. P.R.Vittal. (2014). Allied Mathematics. Margham Publications, Chennai.
- 3. S.Arumugam and S.Ramachandran.(2006). *Invitation to Graph Theory*. Sci Tech Publications (India) Pvt Ltd., Chennai

Web links

- 1. https://youtu.be/rowWM-MijXU
- 2. https://youtu.be/TQvxWaQnrqI
- 3. https://youtu.be/pvLj1s7SOtk
- 4. https://youtu.be/Gxr3AT4NY_Q
- 5. https://youtu.be/xlbbefbYLzg
- 6. https://youtu.be/b0RJkIBhfEM
- 7. https://youtu.be/s5KZw1EpBEo

Pedagogy

Assignment, Seminar, Lecture, Quiz, Group discussion, Brain storming, e-content.

Course Designers

1. Dr. V. Geetha 2. Dr. S. Sasikala

FIRST ALLIED COURSE-II (AC) NUMERICAL ANALYSIS AND STATISTICS

(For B.Sc Computer Science , B.Sc Information Technology & BCA) (2022-2023 and Onwards)

Semester I	Internal Marks: 2	5	Externa	al Marks:75
COURSE CODE	COURSE TITLE	CATEGORY	Hrs / Week	CREDITS
22UCS1AC2/	NUMERICAL			
22UCA1AC2/	ANALYSIS AND	ALLIED	4	3
22UIT1AC2	STATISTICS			

Course Objective

- Understand the implementation of various methods of Numerical Analysis.
- Organize and summarize the statistical data.
- Analyze and evaluate the strengths of the conclusions based on data.

Course Outcomes

Course Outcome and Cognitive Level Mapping

CO Number	CO Statement On the successful completion of the course, students will be able to	Cognitive Level
CO1	Understand the list of basic ideas of Numerical Methods and Statistics.	K1, K2
CO2	Solve the problems using various methods and also classify the given datas.	K2, K3
CO3	Identify the conceptual collection and classification of variables.	К3
CO4	Analyze the accuracy and graphical representation of statistical datas.	K4
CO5	Support the implementation of numerical methods and statistical datas.	K4

Mapping of CO with PO and PSO

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	3	3	3	3	3	3	3	2	3	2
CO2	3	3	2	2	2	3	2	3	2	3
CO3	2	3	3	2	2	2	3	3	2	3
CO4	3	2	3	2	2	3	3	2	3	2
CO5	3	3	2	3	3	3	2	2	3	3

"1" - Slight (Low) Correlation

"2" - Moderate (Medium) Correlation

"3" – Substantial (High) Correlation

"-" indicates there is no correlation.

Syllabus

UNIT	CONTENT	HOURS	Cos	COGNITIVE LEVEL
I	Solution of Algebraic & Transcendental Equations: Introduction — The Bisection Method — The Iteration Method — Newton-Raphson Method (Problems Only) Interpolation: Finite Differences: Forward Differences, Backward Differences — Newton's Formulae for Interpolation — Interpolation with unevenly spaced Points: Lagrange's Interpolation formula	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
II	Numerical Integration: Numerical Integration: Simpson's 1/3-Rule – Simpson's 3/8-Rule (proof not needed). Linear Systems of Equations: Solution of Linear Systems–Direct Methods: Gaussian Elimination Method – Solutions of Linear Systems – Iterative Methods (Problems Only)	12	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4
III	Numerical solution of Ordinary Differential Equations: Introduction – Euler's Method – Modified Euler's Method – Runge-Kutta Methods – Predictor - Corrector Methods : Adams-Moulton Method	12	CO1, CO2, CO3, CO4,	K1, K2, K3, K4
IV	Measures of Central Tendency: Arithmetic Mean – Median – Mode – Geometric Mean – Harmonic Mean. Measures of Dispersion: Mean Deviation – Standard Deviation (Simple Problems Only)	12	CO1, CO2, CO3, CO4,	K1, K2, K3, K4

V	Correlation: Introduction – Meaning of Correlation – Scatter Diagram – Karl Pearson's co-efficient of Correlation – Rank Correlation: Spearman's Rank Correlation Coefficient (Derivation not needed and Simple Problems Only). Linear Regression: Introduction – Linear Regression (Derivation not needed and Simple Problems Only)	12	CO1, CO2, CO3, CO4,	K1, K2, K3, K4
VI	Self Study for Enrichment: (Not included for End Semester Examination) The method of False Position & Central Differences - Trapezoidal rule - Solution by Taylor's Series and Milne's Method - Range — Quartile Deviation - Rank Correlation (Repeated Ranks).	-	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4

Text Books

- Sastry S. S. (1998). Introductory methods of Numerical Analysis, Third Edition. Prentice Hall of India Private Limited.
- 2. Gupta. S.C & Kapoor, V.K (2007). Fundamentals of Mathematical Statistics. Sultan Chand & sons, New Delhi.
- UNIT I Chapter 2: Sections 2.1 2.3(Omit 2.3.1), 2.5(Omit 2.5.1) [1]

Chapter 3: Sections 3.3 (Omit 3.3.4), 3.6, 3.9(3.9.1only) [1]

UNIT – II Chapter 5: Sections 5.4(5.4.2 & 5.4.3 only) [1]

Chapter 6: Sections 6.3(6.3.2 only) & 6.4 [1]

UNIT – III Chapter 7: Sections 7.1, 7.4- 7.6 (Omit 7.4.1 & 7.6.2) [1]

UNIT – IV Chapter 2: Sections 2.5 - 2.9, 2.13 (Omit 2.13.1 & 2.13.2) [2]

UNIT – V Chapter 10: Sections 10.1 - 10.4, 10.7(10.7.1 Only) [2]

Chapter 11: Sections 11.1 & 11.2 [2]

Reference Books

- 1. Jain M. K, Iyengar S. R.K. and Jain R.K. (1999). Numerical Analysis Numerical Methods for Scientific and Engineering Computations. New Age International Private Limited.
- 2. Froberg C.E. (1979). Introduction to Numerical Analysis. II Edition. Addison Wesley

Web Link

- 1. https://youtu.be/qCzUXav5Nk
- 2. https://youtu.be/r6MTvrI8SQ4
- 3. https://youtu.be/s05dONL4xAs
- 4. https://youtu.be/XaHFNhHfXwQ
- 5. https://youtu.be/zPG4NjIkCjc

Pedagogy

Power point presentations, Group Discussions, Seminar, Quiz, Assignment.

Course Designers

- 1. Dr.R.Buvaneswari
- 2. Ms.A.Gowri Shankari