SEVA MANDAL EDUCATION SOCIETY'S
Dr. BHANUBEN MAHENDRA NANAVATI COLLEGE OF HOME SCIENCE
(Empowered Autonomous Status)
NAAC Re-accredited 'A+' Grade with CGPA 3.69/4 (3rd Cycle)UGC Status: College with Potential for Excellence
338, R.A Kidwai Road, Matunga, Mumbai 400019.

Department of Computer Applications

Syllabus for the Academic Year 2024-25

Program: Bachelor's in Computer Applications (BCA)

Semester IV

SN	Courses	Type of Course	Credits	Marks
4.1	Data Structures and Algorithms	Major (Core)	4	100
4.2	Software Engineering	Major (Core)	4	100
4.3	Web Designing	Minor Stream	4	100
4.4	Statistical Methods	OEC	2	50
4.5	Entrepreneurship and Startup Ecosytem	SEC	2	50
4.6	Indian Writing in English	AEC	2	50
4.7	Community Engagement Project	CEP	2	50
4.8	C.C/ NSS/ Health and Wellness	CC	2	50
		Total	22	550

4.1 Major (Core)

Course Title	**Data Structures and Algorithms**
Course Credits	4
Theory **Internal – External**	2 Credits (Theory) + 2 Credits (Practical) 50 Marks (Internal) + 50 Marks (External)
Course Outcomes	Learners will be able to
	1. Understand the fundamental concepts of Data Structures and their applications.
	2. Develop problem-solving skills using Data Structures.
	3. Implement Data Structures using C programming language.
Module 1 (Credit 1)	
Learning Outcomes	After learning the module, learners will be able to- 1. Understand, classify, and apply key operations on various types of data structures 2. Understand arrays and perform operations like accessing, inserting, deleting, and iterating, while exploring 2D and higher-dimensional arrays for applications like matrix operations. 3. Evaluate algorithm efficiency by analysing time complexity and calculate its memory usage through space complexity. 4. Understand the time-space trade off in algorithms and make design decisions balancing memory usage and execution speed.
Content Outline	**Introduction and Overview:** Definition, Classification and Operations of Data Structures. Algorithms: Complexity, Time-Space Tradeoff. **Arrays:** Definition and Classification of Arrays, Representation of Linear Arrays in Memory, Operations on Linear Arrays: Traversing, Inserting, Deleting, Searching, Sorting and Merging. Searching: Linear Search and Binary Search, Comparison of Methods. Sorting: Bubble Sort, Selection Sort, and Insertion Sort. Two Dimensional Arrays, Representation of Two Dimensional Arrays in Memory, Matrices and Sparse Matrices, Multi-Dimensional Arrays.

Module 2 (Credit 1)	
Learning Outcomes	After learning the module, learners will be able to 1. Understand the definition and types of linked lists, as well as how they compare to arrays in terms of representation, traversal, insertion, deletion, and searching. 2. Learn about the applications of linked lists, specifically in adding polynomials. 3. Explore hashing, its role in efficiently storing and retrieving data, and how collisions occur when multiple keys hash to the same index. 4. Explore techniques for handling collisions, such as chaining and open addressing, to maintain the efficiency of hash tables.
Content Outline	**Linked Lists:** Definition, Comparison with Arrays, Representation, Types of Linked lists, Traversing, Inserting, Deleting and Searching in Singly Linked List, Doubly Linked List and Circular Linked List. Applications of Linked Lists: Addition of Polynomials. **Hashing and Collision:** Hashing, Hash Tables, Types of Hash Functions, Collision, Collision Resolution with Open Addressing and Chaining
Module 3 (Credit 1)	
Learning Outcomes	After learning the module, learners will be able to- 1. Comprehend the definition and representation of stacks using arrays and linked lists, along with the various operations that can be performed on stacks. 2. Study the applications of stacks in arithmetic expressions, including Polish notation, the conversion of infix expressions to postfix expressions, and the evaluation of postfix expressions. 3. Grasp the definition of recursion and its notation, along with the concept of the runtime stack. 4. Examine the applications of recursion through examples such ascalculating the factorial of a number, finding the greatest common divisor (GCD), generating the Fibonacci series, and solving the Towers of Hanoi problem. 5. Comprehend the definition of queues and their representation using arrays and linked lists, along with the various types of queues, including simple queues, circular queues, double-ended queues, and priority queues.

	6. Analyze the operations performed on simple queues and circular queues, as well as the applications of queues in real-world scenarios.
Content Outline	**Stacks:** Definition, Representation of Stacks using Arrays and Linked List, Operations on Stacks using Arrays and Linked List, Application of Stacks: Arithmetic Expressions, Polish Notation, Conversion of Infix Expression to Postfix Expression, Evaluation of Postfix Expression**.** **Recursion:** Definition, Recursive Notation, Runtime Stack, Applications of Recursion: Factorial of Number, GCD, Fibonacci Series and Towers of Hanoi. **Queues:** Definition, Representation of Queues using Array and Linked List, Types of Queues: Simple Queue, Circular Queue, Double Ended queue, Priority Queue, Operations on Simple Queues and Circular Queues using Array and Linked List, Applications of Queues
Module 4 (Credit 1)	
Learning Outcomes	After learning the module, learners will be able to 1. Grasp the definition and terminology of graphs, along with various methods of representation. 2. Examine graph traversal techniques to understand how to navigate and process graph structures effectively. 3. Learn the definition and terminology of trees, focusing on binary trees and their traversal methods. 4. Analyze binary search trees, including operations for inserting, deleting, and searching, as well as understand height-balanced trees such as AVL trees and the processes of insertion and deletion within them.
Content Outline	**Graphs:** Definition, Terminology, Representation, Traversal. **Trees:** Definition, Terminology, Binary Trees, Traversal of Binary Tree, Binary Search Tree, Inserting, Deleting and Searching in Binary Search Tree, Height Balanced Trees: AVL Trees, Insertion and Deletion in AVL Tree, Heaps and their representations (Vector Based and Linked)

Assignments/Activities towards ComprehensiveContinuous Evaluation (CCE)

Evaluation	Details	Marks
Internal	Unit test	25 marks
	Internal assessments (Practical test, class test)	25 marks
Internal		**50 marks**
External	Final Exam	50 marks
Total		**100 marks**

Text Books

- R.B. Patel, "Expert Data Structures with C", Khanna Book Publishing Company, 2023
- AICTE Recommended Textbook)
- Seymour Lipschutz, "Data Structures with C", Schaum's Outlines, Tata McGraw Hill, 2011.
- Yashavant Kanetkar, "Data Structures Through C", 4th Edition, BPB Publications, 2022.
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References

- Reema Thareja, "Data Structures Using C", Second Edition, Oxford University Press, 2014.
- Ellis Horowitz, Sartaj Sahni, and Susan Anderson-Freed, "Fundamentals of Data Structures in C", Second Edition, Universities Press, 2007.

Web Resources

- GeeksforGeeks - Data Structures Tutorial
- Khan Academy - Algorithms Course

Lab Programs:

1. Write a program for insertion and deletion operations in an array.
2. Write a program to search for an element in an array using Linear Search and Binary Search. 3. Write a program to sort an array using Bubble Sort, Selection Sort and Insertion Sort. 4. Write a program to merge two arrays.
5. Write a program to add and subtract two matrices.
6. Write a program to multiply two matrices.
7. Write a program to insert an element into a Singly Linked List:
   (a) At the beginning
   (b) At the end
   (c) At a specified position
8. Write a program to delete an element from a Singly Linked List:
   (a) At the beginning
   (b) At the end
   (c) A specified element
9. Write a program to perform the following operations in a Doubly Linked List: (a) Create
   (b) Search for an element
10. Write a program to perform the following operations in a Circular Linked List: (a) Create
    (b) Delete an element from the end
11. Write a program to implement stack operations using an array.
12. Write a program to implement stack operations using a linked list.

13. Write a program to add two polynomials using a linked list.

14. Write a program to evaluate a postfix expression using a stack.
15. Write a program to perform the following using recursion:
    (a) Find the factorial of a number
    (b) Find the GCD of two numbers
    (c) Solve Towers of Hanoi problem
16. Write a program to implement simple queue operations using an array. 17. Write a program to implement circular queue operations using an array. 18. Write a program to implement circular queue operations using a linked list. 19. Write a program to perform the following operations on a binary search tree. (a) Preorder Traversal
    (b) Inorder Traversal
    (c) Postorder Traversal
20. Write a program to perform insertion operation in a binary search tree.

4.2 Major (Core)

Course Title	Software Engineering
Course Credits	4
Theory – Practical Internal - External	Internal - 50 (Theory) External - 50 (Theory)
Course Outcomes	After going through the course, learners will be able to
	1. Acquire a comprehensive understanding of the software development lifecycle and its application in contemporary software engineering practices.
	2. Develop proficiency in project management methodologies and strategic decision-making for successful software project execution.
	3. Master the art of software design, development, and testing to produce robust and efficient software solutions.
Module 1 (Credit 1)	
Learning Outcomes	After learning the module, learners will be able to
	1. Understand the Fundamentals of Software Engineering
	2. Analyze and Apply SDLC Models
	3. Demonstrate Knowledge of Agile Software Development

Content Outline	**Introduction to Software Engineering:** The evolving role of software, Software Engineering Definition, layered technology, process framework. **SDLC models**: The waterfall model, incremental process models, evolutionary process models, the unified process. **Agile software development**: Agility Principles, Agile methods, Plan driven and agile development, Extreme programming, Scrum, A Tool Set for the Agile Process.
Module 2 (Credit 1)	
Learning Outcomes	After learning the module, learners will be able to
	1. Gain an in-depth understanding of Software Requirements Engineering
	2. Identify potential software risks and apply Risk Management Strategies
	3. Implement Effective Project Planning Techniques
Content Outline	**Software Requirements Engineering**: Functional and non-functional requirements, Software Requirements Specification (SRS) document, Requirements Engineering processes, Requirements Elicitation and analysis, Requirements Validation, Requirements Management. **Risk management**: Reactive Vs proactive risk strategies, software risks, risk identification, risk projection, risk refinement, RMMM plan. **Project planning**- Software pricing, Plan-driven development, Project scheduling, Agile planning, Estimation techniques.
Module 3 (Credit 1)	
Learning Outcomes	After learning the module, learners will be able to
	1. Apply Software Design Principles and Techniques
	2. Implement Testing Strategies and Debugging Techniques
	3. Evaluate Software Quality Using Product Metrics

Content Outline	**Design**: Design process and design quality, design concepts, the design model, software architecture, data design, architectural design. **Basic structural modeling**, class diagrams, sequence diagrams, collaboration diagrams, use case diagrams, component diagrams. **Testing Strategies**: A strategic approach to software testing, test strategies for conventional software, black-box and white-box testing, validation testing, system testing, the art of debugging. **Product metrics**: Software quality, metrics for analysis model, metrics for design model, metrics for source code, metrics for testing, metrics for maintenance.
Module 4 (Credit 1)	
Learning Outcomes	After learning the module, learners will be able to
	1. Understand Software Quality Principles
	2. Apply Effective Release Management Strategies
	3. Manage Product Sustenance and Lifecycle
Content Outline	**Quality Management**: Quality concepts, software quality assurance, software reviews, formal technical reviews, statistical software quality assurance, software reliability. **Release Management**: Release planning, development and build plans, release strategies, risk management, and post-deployment monitoring. **Product sustenance**: Maintenance, updates, End of life, migration strategies.

Assignments/Activities towards Comprehensive Continuous Evaluation(CCE):

Evaluation	**Details**	**Marks**
Internal	Unit test	25 marks
	Internal assessments (Quiz, class test, presentations)	25 marks
Internal		**50 marks**
External	Final Exam	50 marks
Total		100 marks

References

- Software Engineering, N.S. Gill, Khanna Publishing House, 2023 (AICTE Recommended Textbook)
- Software Engineering - A Practitioner's Approach, 9th edition, Roger S Pressman,

Bruce R. Maxim. McGraw Hill Education, 2023.
- Software Engineering, Ian Somerville, 9th edition, Pearson Education - 2011.
- Software Engineering: Principles and Practice Hans van Vliet, 2010.
- Stephen Schach, Software Engineering 7th ed, McGraw-Hill, 2007.

4.3 Minor Stream

Course Title	**Web Designing**
Course Credits	4
Theory Internal – External	4 Credits 50 Marks + 50 Marks
Course Outcomes	Upon completion of this course, students will be able to:
	1. To understand the concepts and architecture of the World Wide Web, Markup languages along with Cascading Style Sheets
	2. To understand the concepts of event handling and data validation mechanisms.
	3. To understand the concepts of embedded dynamic scripting on client and server side Internet Programming and basic full stack web development
	4. To develop modern interactive web applications

Module 1 (Credit 1)	
Learning Outcomes	Upon completing this Module, students will be able to:
	1. Understand HTML Basics and Identify HTML Structures
	2. Create Forms and Tables
	3. Organize Content with Lists and DIV Tags
	4. Design Navigation Bars
Content Outline	**Introduction to HTML and Web Design Fundamentals** Introduction to HTML, History of HTML, Objective, basic Structures of HTML, Header Tags, body tags, Paragraph Tags. Tags for FORM Creation, TABLE, FORM, TEXTAREA, SELECT, IMG, IFRAME FIELDSET, ANCHOR. Lists in HTML, Introduction to DIV tag, NAVBAR Design.

Module 2 (Credit 1)	
Learning Outcomes	Upon completion of this Module, students will be able to:
	1. Apply CSS Knowledge:
	2. Create Responsive Designs
	3. Utilize Bootstrap Framework:
	4. Understand Web Infrastructure
Content Outline	**Advanced Web Designing** Introduction to CSS, types, Selectors, and Responsiveness of a web page. Introduction to Bootstrap, downloads/linking, using classes of Bootstrap, understanding theGrid System in Bootstrap. Introduction to www, Protocols and Programs, Applications and development tools, web browsers, DNS, Web hosting Provider, Setting up of Windows/Linux/Unix web servers, Webhosting in cloud, Types of Web Hosting
Module 3 (Credit 1)	
Learning Outcomes	Upon completion of this Module, students will be able to:
	1. Understand JavaScript Basics and Manipulate the DOM
	2. Handle Variables, Arrays, Dates and Strings
	3. Perform Form Validation
	4. Combine HTML, CSS, and JavaScript
Content Outline	**JavaScript Fundamentals and DOM Manipulation** Introduction to JavaScript: Functions and Events, Document Object model traversing using JavaScript. Output System in JavaScript i.e. Alert, throughput, Input box, Console. Variables and Arrays in JavaScript. Date and String handling in JavaScript. Manipulating CSS through JavaScript: Form Validation like Required validator, length validator, Pattern validator. Advanced JavaScript, Combining HTML, CSS and JavaScript events and buttons, controlling your browser. NodeJs.
Module 4 (Credit 1)	
Learning	Upon completion of this unit, students will be able to:

Outcomes	1. Develop AJAX-Based Applications
	2. Comprehend XML Concepts
	3. Utilize XSL and XSLT
	4. Apply JSON in Web Applications
Content Outline	**AJAX, XML, and JSON** Introduction to AJAX, Purpose, advantages and disadvantages, AJAX based Web applications and alternatives of AJAX. Introduction to XML: uses, Key concepts, DTD 8 schemas, XSL, XSLT, and XSL Elements and transforming with XSLT. Introduction to XHTML. JSON: Introduction to JSON, Keys and Values, Types of Values, Arrays, Objects

Assignments/Activities towards Comprehensive Continuous Evaluation (CCE)

Evaluation	**Details**	**Marks**
Internal	**(a) Written Class Test**	**25 Marks**
	(b) Unit Test	**25 Marks**
	(c) Practical Test	**25 marks**
Internal	The best two scores will be selected from the Written Class, Unit Test, and Practical Test	**50 marks**
External	**Final Exams**	**50 marks**
Total		**100 marks**

REFERENCES:

- Laura Lemay, Mastering HTML, CSS & Java Script Web Publishing, BPB Publications, 2016
- Thomas A. Powell, The Complete Reference HTML & CSS, Fifth Edition, 2017
- Silvio Moreto, Bootstrap 4 By Example, ebook, 2016.
- Tanweer Alam, Web Technologies, Khanna Book Publishing, 2011.
- Julie Meloni, J. K. (2018). teach yourself HTML, CSS, and JavaScript All in One (3rd Edition ed.). Pearson.
- David Flanagan (2020), JavaScript: The Definitive Guide (**7th Edition ed.)**, O'Reilly.

WEB RESOURCES :

- www.javatpoint.com
- www.w3schools.com
- https://www.geeksforgeeks.org/web-technology/

PRACTICAL LIST OF PROGRAMS: PART-A

1. Create your class time table using table tag.
2. Design a Webpage for your college containing description of courses, department, faculties, library etc. using list tags, href tags, and anchor tags.
3. Create web page using Frame with rows and columns where we will have header frame, left frame,right frame, and status bar frame. On clicking in the left frame, information should be displayed in right frame.
4. Create Your Resume using HTML, use text, link, size, color and lists. 5. Create a Web Page of a super market using (internal CSS)
6. Use Inline CSS to format your resume that you have created.
7. Use External CSS to format your time table created.
8. Use all the CSS (inline, internal and external) to format college web page that you have created.
9. Write a HTML Program to create your college website using for mobile device.

PART – B

1) Write an HTML/JavaScript page to create login page with validations.
2) Develop a Simple calculator for addiction, subtraction, multiplication and division operation using JavaScript.
3) Use Regular Expressions for validations in Login Page using JavaScript.
4) Write a Program to retrieve date from a text file and displaying it using AJAX.
5) Create XML file to store Student Information like Register Number, Name, Mobile Number,DOB, and Email-Id.
6) Create a DTD for (0).
7) Create XML scheme for (0).
8) Create XSL file to convert XML file to XHTML file.
9) Write a JavaScript program using Switch case.
10) Write a JavaScript program using any 5 events.
11) Write a JavaScript program using built in JavaScript objects.
12) Write program for populating values from JSON text.
13) Write a program to transform JSON text to a JavaScript object.

4.4-Open Elective Course

Course Title	**Statistical Methods**
Course Credits	2
Theory **Internal – External**	2 Credits 25 Marks + 25 Marks
Course Outcomes	After going through the course, learners will be able to
	1. Distinguish different forms of data and understand their characteristics
	2. Apply various statistical measures on data

	3. Interpret the obtained results
Module 1 (Credit 1)	
Learning Outcomes	After learning the module, learners will be able to
	1. detect patterns, trends, and relationships in data.
	2. Makes complex data more understandable by presenting it in a graphical or pictorial form.
	3. Enables easy comparison between multiple data sets through charts, graphs, and other visual representations
Content Outline	**Data types and visualization** • Qualitative and Quantitative data; Geographical, Time series data; Discrete and Continuous data, • Different types of scales: Nominal, Ordinal, Ratio and Interval. • Frequency distribution of discrete and continuous variables. Cumulative frequency distribution. • Graphical representation of frequency distribution by Histogram, Frequency polygon, Frequency curve and Ogives • Diagrammatic representation using Bar diagrams and Pie chart. **Measure of Central Tendencies & Dispersion** • Mean • Median • Mode • Quantiles: Quartiles, Deciles, percentiles • Standard Deviation • Variance

Module 2 (Credit 1)	
Learning Outcomes	After learning the module, learners will be able to
	1. understand how correlation measures the strength and direction of a linear relationship between two variables.
	2. use scatter plots to visualize the relationship between variables.
	3. Develop skills to use regression models for prediction and forecasting in real-world contexts.
	4. learn when to apply z-test and t-test for analysis of data.
Content Outline	**Analysis of Bivariate Data.** • Scatter Diagram • Rank correlation- Spearman's measure. • Concept of linear regression. Principle of least squares. Fitting of straight line by method of least squares. • Relation between regression coefficients and correlation coefficient. Coefficient of determination **Hypothesis Testing** • Null & alternative hypothesis • Large Sample tests (z – tests) • Small sample tests (t-tests) • Goodness of Fit (Chi Square)

Assignments/Activities towards Comprehensive Continuous Evaluation(CCE)

Evaluation	Details	Marks
Internal	Unit Test	**25**
	Continuous Assessment:, Assignment, Presentation	
External	**Written Exam**	**25**
Total		**50 marks**

TEXT BOOK:

- S. C. Gupta, (2018), Fundamentals of Statistics, Himalaya Publishing House.

REFERENCES:

- Efraim Turban, Ramesh Sharda, DursunDelen, David King, (2013), Business Intelligence (2nd Edition), Pearson.
- Swain Scheps, (2008), Business Intelligence for Dummies, Wiley Publications. 3. N. G. Das(2009), Statistical Methods, McGraw-Hill Education(India) Pvt. Ltd. 4. A.Gaur, S. Gaur(2009), Statistical Methods for Practice and Research, Sage Publications

4.5 Skill Enhancing Course (SEC)

Course Title	**Entrepreneurship and Startup Ecosystem**
Course Credits	2
Theory – Practical Internal - External	Internal – 25 External - 25
Course Outcomes	After going through the course, learners will be able to
	1. To understand Entrepreneurship and its types
	2. To understand that not all ideas can be turned into viable business models and guestimate business potential of an idea
	3. To understand different type of finances available and financing methods
	4. To be able to draft business plans on an identified idea
	5. To understand the nuances of operating a startup – low budget marketing, stabilizing operations, build a team from scratch and scaling the business
	6. To know what is a Family Business and how is it different from Entrepreneurship
Module 1 (Credit 1)	
Learning Outcomes	After learning the module, learners will be able to
	1. To recognize the traits that contribute to entrepreneurial success, along with the unique attributes required to start and grow a business.
	2. To understand the significance of entrepreneurship, particularly start-ups, in driving economic growth and innovation.
	3. To list and explore various sources for generating business ideas, along with methods for identifying and evaluating potential opportunities.
	4. To develop skills in analysing the competitive environment, industry trends, and external factors that influence business success.
Content Outline	**1.1 Introduction to Entrepreneurship & Family Business** • Definition and Concept of entrepreneurship • Entrepreneur Characteristics • Classification of Entrepreneurs • Role of Entrepreneurship in Economic Development –Start-ups • Knowing the characteristics of Family business with discussion on few Indian cases of Family Business like Murugappa, Dabur, Wadia, Godrej, Kirloskar etc. • Introduction to Social Entrepreneurship • Introduction - Sustainable Entrepreneurship **1.2 Indian Knowledge System – History of Entrepreneurship in India** • Philosophy • Family Business and Trading • Case Studies

	1.3 Evaluating Business opportunity • Sources of business ideas and opportunity recognition • Guesstimating the market potential of a business idea • Feasibility analysis of the idea • Industry, competition and environment analysis
Module 2 (Credit 1)	
Learning Outcomes	After learning the module, learners will be able to
	1. To understand the nuances of operating a startup – low budget marketing, stabilizing operations, build a team from scratch and scaling the business
	2. To be able to draft business plans on an identified idea
	3. To know what is a Family Business and how is it different from Entrepreneurship
Content Outline	**2.1 Building Blocks of starting ventures** • Low cost Marketing using digital technologies • Team building from scratch • Venture Funding • Establishing the value-chain and managing operations • Legal aspects like IPR and compliances **2.2 Start-up Ecosystem** • Know the components of the start-up ecosystem including Incubators, Accelerators, Venture Capital Funds, Angel Investors etc. • Know various govt. schemes like Start-up India, Digital India, MSME etc. • Sources of Venture Funding available in India • Source of Technology, Intellectual Property management

Assignments/Activities towards Comprehensive ContinuousEvaluation (CCE):

Evaluation	Details	Marks
Internal	Unit Test	**25**
	Continuous Assessment:, Assignment, Presentation	
External	**Written Exam**	**25**
Total		**50 marks**

References

- Startup India Leaning Program by Start Up India available at www.startupindia.gov.in
- Entrepreneurship, Rajeev Roy, Oxford University Press
- Entrepreneurship: Successfully Launching New Ventures by R. Duane Ireland Bruce R. Barringer, Pearson Publishing
- Family Business Management by Rajiv Agarwal, Sage Publishing
- Anish Tiwari (2003), "Mapping the Startup Ecosystem in India", Economic & Political Weekly
- Ramachandran, K, Indian Family Businesses: Their survival beyond three generations, ISB Working Paper

4.6 Ability Enhancement Course (AEC)

Course Title	**Indian Writing in English**
Course Credits	2
Course Duration	30 Hours
Course Outcomes	On completion of the course, the learners will be able to:
	• Interpret creative expression through close reading of fictional texts and poems. • Be familiar with writings by Indian Authors. • Recognize themes and articulate appropriate responses in reaction.
MODULE 1:(Credit1)	
Learning Outcomes:	After learning the module, the learner will be able to: 1. Appreciate literary craftsmanship in a short story. 2. Recognize the elements of plot, character, setting, narrative and point of view in a story.
Content Outline	• Elements of a Story - Genre, Plot, Character, Setting, Theme, Narrative, Point of View • Short Stories: • Vaidehi -'Akku' • Ambai -'Yellow Fish'
MODULE 2:(Credit1)	
Learning Outcomes:	o After lear*ning the module, the learner will be able to:* *o Analyze poetic* devices such as figures of speech, rhyme scheme, tone, and style.
Content Outline	• Elements of a Poem - Types, Poetic Devices, Figures of Speech o Appreciation of a Poem • Kamala Das –An Introduction • Rabindranath Tagore – Paper Boats • Sarojini Naidu –The Illusion of Love

Assignments/Activities towards Comprehensive ContinuousEvaluation (CCE):

Evaluation	Details	Marks
Internal	Projects (Locate poems in one's regional language/translation. Summarise and elucidate its themes in English. Give Voice to a Minor/Silent Character)	**25**

External	**Written Exam (**Comprehensive Questions Based on Prescribed Text Vocabulary Based Questions, Questions–Reference to Context)	**25**
Total		**50 marks**

REFERENCES:

- Das, Kamala. *Summer in Calcutta.* Everest Press, New Delhi.1965.
- Holmstorm, Lakshmi. *Inner Courtyard : Stories by Indian Women.*Virago,1990.
- Tagore, Rabindranath. *The Crescent Moon*. MacMillan,1914.

4.7 Community Engagement Project (CEP)

Course Title	**Community Engagement Project**
Course Credits	2
Internal **External**	25 Marks + 25 Marks
Course Outcomes	After going through the course, learners will be able to
	1. Develop a comprehensive understanding of social responsibility in the digital age.
	2. Design, plan, and implement community engagement programs that address social issues and empower communities
	3. Empower communities by offering essential skills such as digital literacy, cyber safety, and practical vocational training. They will implement programs that improve the employability, safety, and well-being of community members
	4. Measure outcomes, gather feedback, and adapt their approaches to ensure long-term positive effects on the community
Module 1 (Credit 1)	
Learning Outcomes	Upon completing this module, learners will be able to
	1. Understand the Concept and Importance of Community Engagement.
	2. Evaluate Ethical and Legal Considerations in Community Work.
	3. Design and Implement Community Engagement Activities.
	4. Assess and Analyze Social Issues Affecting Communities

Content Outline	**Community Engagement** • Understanding Community Engagement • Understanding Social Issues • Need of Community Engagement • Ethical Considerations in Community Engagement • Mode of Spreading Awareness • Understand the basic legal and policy issues related to community work
Module 2 (Credit 1)	
Learning Outcomes	Upon completing this module, learners will be able to
	1. Understand how to empower diverse communities by providing essential skills in digital literacy, cyber safety, and practical vocational training
	2. Design, implement, and evaluate community engagement activities effectively. They will assess the impact of their initiatives, gather feedback, and ensure their programs are responsive to community needs, ethical considerations, and sustainability goals
Content Outline	**Community Engagement Activities** **(A) Digital Literacy programs for senior citizen** Helping older adults become proficient in using digital devices, online banking, social media, and other essential online tools **(B) Cyber Safety Awareness** Educating individuals on how to protect themselves from online threats, including phishing, scams, identity theft, and ensuring secure digital behaviour. **(C) Skill development workshops in schools and Localities** • Organizing and conducting skill development workshops aimed at empowering individuals in schools and local communities. Focus on practical skills that improve employability, such as basic computer skills, communication skills, leadership development, problem-solving, and vocational training. *(Students may choose one of the above options—A, B, or C—for their Community Engagement Activity.)*

Assignments/Activities towards Comprehensive ContinuousEvaluation (CCE):

Evaluation	Details	Marks
Internal	**Field Diary/Journal**	**25**
External	**Project Report**, **Presentation**, and **Viva**, with evaluation conducted by **external experts**	**25**
Total		**50 marks**

REFERENCES:

- Fostering Social Responsibility & Community Engagement in Higher Educational Institutions in India 2.0, National Curriculum Framework and Guidelines, UGC, January 2022.
- Principles of Community Engagement, 2nd Edition, NIH Publication, 2011.
- Rumley Makara, Modern-day Strategies for Community Engagement – How to effectively build bridges between people and the bottom line, 2020.
- Jaago Teens, Cyber Safety for Everyone: A Comprehensive guide to online safety (3rd Edition), BPB Publications, March 2024.

- Prof. M. Jagadesh Kumar, Chairman, UGC, A Handbook on basics of Cyber Hygiene for Higher Education Institute, UGC, November 2024

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