TUMKUR UNIVERSITY

Board of Studies in Computer Science

Curriculum Structure and Syllabus for V and VI Semesters

Bachelor of Commerce in Computer Science (BCom CS)
Choice Based Credit System

2026 - 27 onwards

BOS in Computer Science Committee Members

1.	**Dr. M. Basavanna** **Professor & Chairman,** Department of Studies in Computer Applications (MCA), Davangere University, Davangere	Chairperson
2.	**Dr. Kusuma Kumari B.M** **Associate Professor,** Department of Studies and Research in Computer Applications, Tumkur University, Tumakuru	Member
3.	**Dr. Ramani. R** **Assistant Professor** Department of Computer Science, University College of Science Tumkur University, Tumakuru	Member
4.	**Dr. M. Ravi Kumar** **Professor** Department of Computer Science Kuvempu University, Shivamogga	Member
5.	**Dr. Sheetalrani R.K** **Assistant Professor** Department of Computer Science & Applications Karnataka State Akkamahadevi Women University, Vijayapura.	Member
6.	**Dr. Girija D.K** **Associate Professor** Department of Computer Science Government First Grade College, Koratagere	Member
7.	**Dr. Nagaraju K V.** **Associate Professor** Department of Computer Science Government First Grade College for Womens, Tumkur.	Member

Special Thanks to:

1.	**Capt. Ramalinga Reddy S** Assistant Professor Department of Computer Science Sri Siddaganga Arts and Commerce Evening College Tumkur.
2.	**Dr. Haridas S.** Associate Professor Department of Computer Science Government First Grade College, Tumkur.
3.	**Dr. Husna Sultana** Associate Professor Department of Computer Science Government First Grade College, Tumkur.
4.	**Dr. Prakash B.R** Assistant Professor and HOD Department of Computer Science Government First Grade College, Tipatur.
5.	**Sri. Mohan Kumar N** Assistant Professor and HOD Department of Computer Science Y.E.R Government First Grade College, Pavagada.
6.	**Dr. Manjunath S** Assistant Professor, Department of Computer Science Y.E.R Government First Grade College, Pavagada.
7.	**Kiran Kumar M** Assistant Professor Department of Computer Science Government First Grade College, Tipatur.
8.	**Mujtaba Farheen** Assistant Professor Department of Computer Science Government First Grade College, Madhugiri.
9.	**Harikumar M E** Assistant Professor Department of Computer Science Government First Grade College, Madhugiri

Internal Assessment Marks for Theory and Practical

Internal Assessment Marks Allotment for Theory	
Internal Test 1	05
Internal Test 2	05
Assignment	05
Seminar/Quiz	05
TOTAL	**20**

Internal Assessment Marks Allotment for Practical	
Internal Test	05
Record and Attendance	05
TOTAL	**10**

Evaluation Scheme for Lab Examination

Assessment Criteria	
Writing 2 Programs	**10**
Execution of 2 Programs	**20**
Viva	**10**
Total	**40 Marks**

SEMESTER – V

Sl. No	Paper	Title of the Paper	Instruction Hrs. per Week	No. of Credits	Duration of the Exam.	Marks		
						Internal Assessment	Semester End Exam.	Total
1	BCOMCST-501	HTML 5 & CSS	3	3	3 Hrs.	20	80	100
2	BCOMCSP-502	HTML 5 & CSS LAB	2	1	3 Hrs.	10	40	50
3	BCOMCST-503	Computerized Accounting with Tally ERP	3	3	3 Hrs.	20	80	100
4	BCOMCSP-504	Tally Lab	2	1	3 Hrs.	10	40	50
TOTAL			10	**8**				**300**

NOTE:

Theory: 1 Hr. = 1 Credit **Practical: 2 Hrs. = 1 Credit**

BCOMCST : B.COM Computer Science Core Paper Theory
BCOMCSP : B.COM Computer Science Core Paper Practical

SEMESTER – VI

Sl. No	Paper	Title of the Paper	Instruction Hrs. per Week	No. of Credits	Duration of the Exam.	Marks		
						Internal Assessment	Semester End Exam.	Total
1	BCOMCST-601	Python Programming	3	3	3 Hrs.	20	80	100
2	BCOMCSP-602	Python Lab	2	1	3 Hrs.	10	40	50
3	BCOMCST-603	Fundamentals of AI	3	3	3 Hrs.	20	80	100
4	BCOMCSP-604	Project Lab	2	1	3 Hrs.	10	40	50
TOTAL			10	**8**				**300**

NOTE:

Theory: 1 Hr. = 1 Credit **Practical: 2 Hrs. = 1 Credit**

BCOMCST : B.COM Computer Science Core Paper Theory
BCOMCSP : B.COM Computer Science Core Paper Practical

FIFTH SEMESTER			
Subject Name: HTML 5 & CSS			
Subject Code	**BCOMCST-501**	CIE Marks	20
No. of Hours/Week:	3	SEE Marks	80
Total Hours:	48	Credits	3

COURSE OBJECTIVES:

After completion of this course, students will be able to:

1. Understand the fundamentals of web technologies and webpage design.
2. Develop structured webpages using HTML5 elements and semantic tags.
3. Design responsive and attractive web pages using CSS.
4. Apply forms, multimedia, tables, and layout techniques in real-time applications.

COURSE OUTCOMES:

Students will be able to:

1. Create static websites using HTML5 tags and attributes.
2. Design professional webpages using CSS styling techniques.
3. Build responsive page layouts using CSS Flexbox and Grid.
4. Develop business-oriented web pages such as product pages, registration forms, and portfolios.

UNIT 1	**Introduction to HTML5 and Basic Webpage Design**	**Hours 10**
	Introduction to Internet and WWW, Web Browsers and Web Servers, Introduction to HTML5, Structure of HTML Document, HTML Editors and Tools, Basic HTML Tags: <html>, <head>, <title>, <body>, Headings, Paragraphs, Line Breaks, Text Formatting Tags, Comments in HTML, Lists: Ordered List, Unordered List, Description List, Hyperlinks and Anchor Tags, Image Tag and Image Mapping	
UNIT 2	**HTML5 Elements, Tables and Forms**	**Hours 10**
	HTML5 Semantic Elements: <header>, <footer>, <section>, <article>, <nav>, Tables in HTML5: Rows, Columns, Cell Padding, Cell Spacing, Rowspan and Colspan, HTML Forms: Form Elements, Input Types, Labels, Textbox, Password, Radio Button, Checkbox, Dropdown List, Textarea, Buttons, HTML5 Form Validation, Audio and Video Tags, Embedding Google Maps and YouTube Videos, Iframes	
UNIT 3	**Introduction to CSS and Styling Techniques**	**Hours 10**
	Introduction to CSS, Types of CSS: Inline CSS, Internal CSS, External CSS, CSS Syntax and Selectors, Colors and Backgrounds, CSS Fonts and Text Formatting, Borders, Margins, Padding, CSS Box Model, Styling Links and Lists, CSS Properties for Images, CSS Display Property	

UNIT 4	**Advanced CSS and Responsive Web Design**	**Hours 10**
	CSS Box Model and CSS Positioning: Static, Relative, Absolute, Fixed, and Sticky positioning. Layer management using z-index, overflow, and visibility. Introduction to CSS Flexbox and flexible layouts. CSS Grid Layout: Grid containers, rows, columns, gaps, and responsive layouts. Responsive Web Design concepts and mobile-first approach. Viewport settings and responsive units (%, em, rem, vw, vh). Media Queries for different screen sizes and devices. Responsive images and videos. CSS Transitions, Transformations, and Animations using @keyframes. Hover effects, shadows, gradients, and basic visual enhancements.	
UNIT 5	**Website Design, UI/UX, and Deployment Basics**	**Hours 08**
	Designing navigation bars and responsive menus. Creating drop-down menus using CSS. Website planning, site structure, and page organization. Introduction to wireframes and webpage layouts. UI (User Interface) and UX (User Experience) fundamentals. Color combinations, visual hierarchy, and web typography. Accessibility and readability considerations. Multi-page website development and internal linking. Basics of website hosting, domain names, and web servers.	

TEXT BOOK:

1. *Beginning HTML5 and CSS3* by Christopher Murphy
2. *Web Programming using HTML5, CSS and JavaScript* by Kogent Learning

REFERENCE BOOKS:

1. *HTML and CSS: Design and Build Websites* by Jon Duckett
2. *Learning Web Design* by Jennifer Robbins

FIFTH SEMESTER			
Subject Name: HTML 5 & CSS LAB			
Subject Code	**BCOMCSP-502**	CIE Marks	10
No. of Hours/Week:	2	SEE Marks	40
Total Hours:	30	Credits	1

LIST OF LAB PROGRAMS

Part – A

1. Create a personal profile webpage containing name, photo, educational details, hobbies, and contact information using headings, paragraphs, images, and formatting tags.
2. Design a webpage for a college department including courses offered, faculty details, infrastructure, and achievements using lists and hyperlinks.
3. Create a restaurant menu webpage using ordered and unordered lists with food categories and prices.
4. Develop a professional resume webpage with sections like career objective, education, skills, projects, and contact details.
5. Create a tourism webpage displaying famous places, images, maps, and descriptions of tourist attractions.
6. Design a student registration form using textboxes, radio buttons, checkboxes, dropdown lists, and submit buttons.
7. Create a job application form with validation for email, phone number, and required fields.
8. Develop a feedback form for students to provide feedback about teachers, infrastructure, and facilities.

Part – B

1. Create a semester timetable using HTML tables with proper rows, columns, and merged cells.
2. Develop a business company homepage using CSS colors, fonts, backgrounds, and navigation menus.
3. Create a responsive image gallery with hover effects and CSS styling.
4. Design an online shopping product page displaying product image, price, description, and buy button.
5. Create a responsive navigation menu using CSS Flexbox and media queries.
6. Develop a mobile-friendly landing page for a startup or business using CSS Grid and responsive design.
7. Design a stylish login form with CSS transitions, animations, shadows, and hover effects.
8. Create a webpage for college fest or seminar registration including event schedule and registration form.

FIFTH SEMESTER			
Subject Name: Computerized Accounting with Tally ERP			
Subject Code	**BCOMCST-503**	CIE Marks	20
No. of Hours/Week:	3	SEE Marks	80
Total Hours:	48	Credits	3

COURSE OBJECTIVES:

1. Understand the concepts and applications of computerized accounting systems in modern business organizations.
2. Develop practical knowledge of TallyPrime / Tally ERP for managing accounting transactions, GST, and inventory operations.
3. Create and maintain companies, ledgers, vouchers, payroll, banking, and financial records using Tally ERP.
4. Generate and analyze financial statements, GST reports, inventory reports, and business accounting reports.
5. Develop industry-oriented practical skills through integrated real-time accounting projects and computerized business applications.

COURSE OUTCOMES:

After successful completion of the course, students will be able to:

1. Understand the concepts of computerized accounting.
2. Use Tally ERP for accounting and inventory management.
3. Record GST transactions and generate reports.
4. Prepare payroll and banking operations in Tally.
5. Generate financial statements and accounting reports.

UNIT 1	**Introduction to Computerized Accounting and Tally ERP**	**Hours 10**
	Introduction to Computerised Accounting: Meaning and features of computerized accounting, Advantages and limitations of computerized accounting, Difference between manual accounting and computerized accounting, Role of accounting software in business organizations. **Introduction to Tally ERP:** Meaning and importance of Tally ERP, Features of Tally ERP/Tally Prime, Accounting concepts and principles in Tally, User interface and screen components, Company information menu. **Creating and Configuring Company:** Company creation, Selecting and loading company, Altering and deleting company ,Company features and configuration, Security control and password management, Backup and restore of company data. **Accounting Fundamentals:** Types of accounts, Golden rules of accounting, Accounting vouchers and voucher types.	
UNIT 2	**Accounting Masters and Voucher Entry**	**Hours 10**
	Accounting Masters: Groups and multiple groups, Ledgers and multiple ledgers, Cost centers and cost categories, Bill-wise details, Interest calculation.	

	Voucher Entry in Tally: Contra voucher, Payment voucher, Receipt voucher, Journal voucher, Purchase voucher, Sales voucher, Debit note and credit note. **Day Book and Transactions:** Recording daily business transactions, Cash and bank transactions, Outstanding management, Bill settlement process. **Practical Accounting Applications:** Trading business transactions, Service business transactions, Preparation of ledger accounts.	
UNIT 3	**Inventory Management and GST**	**Hours 10**
	Inventory Management: Introduction to inventory management, Stock groups and stock categories, Units of measurement, Godowns and warehouse management, Stock items creation. **Inventory Vouchers:** Purchase order, Sales order, Delivery note, Receipt note, Stock journal, Physical stock voucher. **GST in Tally ERP:** Introduction to GST, GST concepts: CGST, SGST, IGST, Enabling GST in Tally, GST ledger creation, GST purchase and sales entries, GST tax invoices, GST reports and returns overview. **Inventory Reports:** Stock summary, Movement analysis, Reorder level reports.	
UNIT 4	**Payroll, Banking and Taxation**	**Hours 09**
	Payroll Management: Introduction to payroll accounting, Employee groups and employee creation, Salary structures and pay heads, Attendance and payroll vouchers, Salary payment processing. **Banking Features in Tally:** Bank reconciliation statement, Cheque printing, Electronic payments, Auto bank reconciliation. **Taxation Features:** TDS basics, TCS basics, Statutory reports, E-filing concepts. Practical Applications: Payroll processing for employees , Preparation of salary statements ,Bank reconciliation exercises .	
UNIT 5	**Financial Reports and Advanced Features**	**Hours 09**
	Financial Statements: Trial balance, Profit and loss account, Balance sheet, Cash flow statement, Fund flow statement. **MIS and Analytical Reports:** Ratio analysis, Budget and controls, Cost analysis reports. **Data Management and Security:** Data synchronization, Backup and restore, Data export and import, Security and user management. **Advanced Features:** Printing invoices and reports, Multi-currency accounting, Multi-user environment, Introduction to Tally audit.	

TEXT BOOKS:

1. *Accounting with Tally ERP 9* - Namrata Agrawal, Asian Publishers.
2. *GST and Tally ERP 9 Training Guide* - Asok K. Nadhani, BPB Publications.

REFERENCE BOOKS:

1. *Computerized Accounting Using Tally ERP 9* - K.K. Nadhani, BPB Publications.
2. *Tally ERP 9 in Simple Steps* - Kogent Learning Solutions Inc., Dreamtech Press.
3. *Implementing Tally ERP 9* - A.K. Nadhani and K.K. Nadhani, BPB Publications.

FIFTH SEMESTER			
Subject Name: Tally Lab			
Subject Code	**BCOMCSP-504**	CIE Marks	10
No. of Hours/Week:	2	SEE Marks	40
Total Hours:	30	Credits	1

LIST OF LAB PROGRAMS

Program 1: Create company: "Sri Lakshmi Super Market"
Program 2: Create

- Groups
- Ledgers
- Customers
- Suppliers

Program 3: Record:

- Capital introduction
- Purchases
- Sales
- Expenses
- Bank transactions

Output:
Students generate:

- Day Book
- Cash Book
- Ledger Reports

Program 4: Enable GST in company features.
Program 5: Create

- CGST
- SGST
- IGST ledgers

Program 6: Record GST purchase and sales transactions.

Program 7: Generate GST invoices and tax reports.
Output:

- GST Summary
- Tax Invoice
- Purchase Register
- Sales Register

Program 8: Create

- Stock Groups
- UNIT s
- Stock Items

Program 9: Maintain

- Opening stock

- Purchase stock
- Sales stock

Program 10:

Manage:

- Godowns
- Damaged goods
- Stock transfers

Output:

- Stock Summary
- Inventory Reports
- Closing Stock

Program 11: Create employee records.

Program 12: Prepare salary structure.

Program 13: Process monthly payroll.

Program 14: Perform Bank Reconciliation.

Output:

- Payslips
- Payroll Register
- BRS Report

Program 15: Generate:

- Trial Balance
- Profit & Loss Account
- Balance Sheet

Program 16: Analyze

- Cash Flow
- Expenses
- Profitability

Program 17: Backup and restore company data.

Final Output: Complete computerized accounting project.

SIXTH SEMESTER			
Subject Name: Python Programming			
Subject Code	**BCOMCST-601**	CIE Marks	20
No. of Hours/Week:	3	SEE Marks	80
Total Hours:	48	Credits	3

COURSE OBJECTIVES:

1. Understand the fundamentals of Python programming language.
2. Develop problem-solving skills using Python.
3. Create programs using functions, strings, lists, tuples, dictionaries, and files.
4. Build simple GUI applications and database applications using Python.
5. Apply Python programming in real-time business and practical applications.

COURSE OUTCOMES:

Students will be able to:

1. Write and execute Python programs using proper syntax.
2. Develop applications using functions and data structures.
3. Handle files and exceptions effectively.
4. Create GUI-based applications using Tkinter.
5. Develop small real-time applications using Python and databases.

UNIT 1	**Introduction to Python**	**Hours 10**
	Introduction to Python, Features and Applications of Python, Installing Python, Python IDE, Running Python Programs, Variables and Data Types, Input and Output Functions, Operators in Python, Comments in Python, Decision Making Statements (if, if-else), Looping Statements (for, while), Break and Continue Statements.	
UNIT 2	**Functions and Strings**	**Hours 10**
	Introduction to Functions in Python, Advantages of Functions, Defining and Calling Functions, Function Arguments, Types of Arguments, Return Statement, Scope of Variables, Introduction to Strings, Creating Strings, Accessing String Characters, String Slicing, String Concatenation, String Repetition, String Methods (upper(), lower(), title(), strip(), replace(), find(), split()), String Formatting, Checking String Properties (isalpha(), isdigit(), isalnum()).	
UNIT 3	**Data Structures**	**Hours 10**
	Introduction to Lists, Creating Lists, Accessing List Elements, Updating List Elements, List Methods (append(), insert(), remove(), pop(), sort()), List Traversing using Loops, Nested Lists, Introduction to Tuples, Creating and Accessing Tuples, Tuple Operations, Introduction to Dictionaries, Creating Dictionaries, Accessing Dictionary Elements, Adding and Updating Dictionary Values, Dictionary Methods (keys(), values(), items()), Introduction to Sets, Creating Sets, Set Operations (add(), remove(), union(), intersection()), Difference between Lists, Tuples, Dictionaries, and Sets.	

UNIT 4	**Fundamentals of GUI Programming with Tkinter**	**Hours 10**
	Introduction to Graphical User Interface (GUI), including its concepts, advantages, and applications. Introduction to Tkinter, its features, architecture, and the process of importing the Tkinter module. Creating a basic Tkinter window and understanding the mainloop() function. Setting the window title, size, geometry, and background properties. Creating and customizing Label widgets, implementing Buttons and handling button events using the command option, and using the Entry widget for accepting and displaying user input. Organizing widgets using Frames and managing layouts with the pack(), grid(), and place() geometry managers. Developing simple GUI applications by integrating labels, buttons, entry widgets, and frames.	
UNIT 5	**Advanced Tkinter Widgets and Event Handling**	**Hours 10**
	Radio Buttons and Check Buttons for user selections, List Boxes for displaying and selecting multiple items, and the Text widget for multi-line text input and output. Displaying information, warning, error, and confirmation dialogs using Message Boxes. Event handling and event binding with keyboard and mouse actions. Creating simple forms with input validation and introducing Menu widgets for creating menu bars and submenus. Working with common dialog boxes such as file open and save dialogs. Integrating multiple widgets to develop interactive GUI applications,	

TEXT BOOKS:

1. R. Nageswara Rao – *Core Python Programming*, Dreamtech Press.
2. Reema Thareja – *Python Programming: Using Problem Solving Approach*, Oxford University Press.
3. E. Balagurusamy – *Introduction to Computing and Problem Solving Using Python*, McGraw Hill Education India.

REFERENCE BOOKS:

1. Learning Python – Mark Lutz, O'Reilly Media.
2. Head First Python – Paul Barry, O'Reilly Media.
3. Python Crash Course – Eric Matthes, No Starch Press.

SIXTH SEMESTER			
Subject Name: Python Lab			
Subject Code	**BCOMCSP-602**	CIE Marks	10
No. of Hours/Week:	2	SEE Marks	40
Total Hours:	30	Credits	1

LIST OF LAB PROGRAMS

Part – A

1. Write a Python program to calculate total, average, and grade of a student.
2. Develop a program to calculate total bill amount with GST.
3. Write a program to calculate employee salary with bonus and deductions.
4. Create a program using decision-making statements to check account balance and withdraw amount.
5. Develop a program to check password strength using string methods.
6. Create a program using functions to store and display contact details.
7. Write a program to convert text into uppercase, lowercase, and title case.
8. Create a program to check valid email format using string operations.

Part – B

1. Develop a shopping cart using lists.
2. Create a program using lists to maintain attendance records.
3. Write a program using dictionaries to store employee details.
4. Develop a program using sets and dictionaries to manage library books.
5. Create a login form using Tkinter labels, entry widgets, and buttons.
6. Develop a GUI application for student registration.
7. Create a calculator using Tkinter.
8. Develop a feedback form using radio buttons and check buttons.

SIXTH SEMESTER			
Subject Name: Fundamentals of AI			
Subject Code	**BCOMCST-603**	CIE Marks	20
No. of Hours/Week:	3	SEE Marks	80
Total Hours:	**48**	Credits	3

COURSE OBJECTIVES:

1. To introduce the basic concepts of Artificial Intelligence.
2. To understand the applications of AI in education, business, banking, agriculture, healthcare, and daily life.
3. To familiarize students with AI tools and technologies.
4. To develop practical skills in using AI-based applications.

COURSE OUTCOMES:

After successful completion of the course, students will be able to:

1. Understand the fundamentals and importance of Artificial Intelligence.
2. Identify different AI technologies and applications.
3. Use basic AI tools for communication, content creation, and business purposes.
4. Apply AI concepts in commerce, arts, and social science domains.

	Introduction to Artificial Intelligence	**Hours 10**
UNIT 1	**Introduction to Artificial Intelligence:** Meaning and Definition of AI, History and Evolution of AI, Features and Characteristics of AI, Difference between Human Intelligence and Artificial Intelligence, Importance of AI in Modern Society. **Types of Artificial Intelligence:** Narrow AI, General AI, Super AI, Reactive Machines, Limited Memory AI **Components of AI:** Data, Algorithms, Machine Learning, Neural Networks, and Automation. **Benefits of AI**: Challenges of AI, AI and Employment, Future Scope of AI.	
	AI Tools and Digital Productivity	**Hours 09**
UNIT 2	**Introduction to AI Tools :** AI Chabot's, AI Writing Assistants, AI Image Generators, AI Voice Assistants, AI Translation Tools. **AI Tools for Students and Teachers**: AI for Note Preparation, AI for Presentation Creation, AI for Summarization, AI for Language Translation, AI for Grammar Correction. **AI Tools for Business and Commerce:** AI in Accounting, AI in Marketing, AI in Customer Support, AI in Data Analysis, AI in Online Business. **Generative AI:** Meaning of Generative AI, Text Generation, Image Generation, Video Generation, Responsible Usage of Generative AI	

UNIT 3	**AI in Daily Life and Smart Applications**	**Hours 10**
	Introduction to Smart Technologies: Meaning of Smart Technology, AI in Everyday Life, Smart Phones and AI Features, AI in Television and OTT Platforms, AI in Online Applications **AI in Communication:** AI-based Voice Assistants, AI Chatbots, AI in Social Media Platforms, AI in Email and Messaging Applications, AI Translation Applications. **AI in Education and Business:** AI in Online Learning, AI in Digital Payments, AI in Banking Applications, AI in Online Shopping, AI in Customer Service.	
UNIT 4	**Ethical AI and Cyber Awareness**	**Hours 10**
	Ethics in Artificial Intelligence: Meaning of AI Ethics, Responsible AI Usage, Transparency in AI and Fairness and Bias in AI. **Privacy and Security:** Data Privacy, Digital Footprint, AI and Cyber Security, Safe Use of AI Platforms. **AI and Society:** Impact of AI on Employment, AI in Governance, AI in Media and Communication, Social Impact of AI. **Challenges of Artificial Intelligence**: Bias and Discrimination, Fake Content and Deepfakes, AI Misuse, Dependency on Technology. **Future Trends in AI:** AI and Robotics, AI in Smart Cities, AI in Education and Commerce, Future Careers in AI.	
UNIT 5	**Practical Applications of AI**	**Hours 09**
	AI in Daily Life: AI in Mobile Phones, AI in Online Shopping, AI in Banking Apps, AI in Social Media. **AI in Commerce and Arts:** AI for Content Creation, AI for Advertising, AI in Financial Analysis, AI in Digital Marketing, AI in Report Preparation. **AI for Communication:** AI-based Email Writing, AI Translation Tools, AI Voice Typing, AI Meeting Assistants.	

TEXT BOOKS:

1. **Artificial Intelligence** – Dr. S. Kaushik
2. **Artificial Intelligence and Machine Learning** – C. S. R. Prabhu

REFERENCE BOOKS:

1. **Fundamentals of Artificial Intelligence** – Dr. S. Balamurugan, Dr. S. Chitra, and Dr. R. Rajaram
2. **Introduction to Artificial Intelligence** – Dr. A. P. Godse and D. A. Godse

SIXTH SEMESTER			
Subject Name: Project Lab			
Subject Code	**BCOMCSP-604**	CIE Marks	10
No. of Hours/Week:	2	SEE Marks	40
Total Hours:	**30**	Credits	1

Project Planning

Students should select a project topic based on the knowledge and skills acquired in the previous semesters. They are encouraged to develop projects using technologies such as **HTML5 & CSS**, **Python**, **Tally**, and **Artificial Intelligence (AI)** studied during the course.

Team Formation

- Team size: **3 to 5 students**.
- One student should act as the **Team Leader**.
- Each member should contribute to the project and maintain a record of assigned work.

Tools

- Students may use any suitable programming language or software studied in previous Semesters.
- Open-source tools are encouraged.

Report Submission

- Submit the **mini project report** along with the **source code and related project files**.
- The project report must be **spiral bound**.
- Two **spiral-bound copies** of the report should be submitted:
    - **One copy** for the **Department**.
    - **One copy** for the **Student's personal record**.
- The report should follow the prescribed project report format and include all relevant documentation and outputs.

Question Paper Pattern for Semester End Examination (SEE)

(Common for V and VI Semester)
SUBJECT NAME

Time: 3 Hrs **Max. Marks: 80**

Instruction to Candidate: Answer all the Sections

SECTION A

I. Answer any ten of the following questions **(10X2 = 20)**

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.

SECTION B

II. Answer any five of the following questions **(5X5 = 25)**

13.
14.
15.
16.
17.
18.
19.

SECTION C

III. Answer any five of the following questions **(5X7 = 35)**

20.
21.
22.
23.
24.
25.
26.