COURSE OUTCOME

Programme Outcomes:

The Curriculum offered in the college is prescribed by the University and the College pays attention towards the incorporation of the specific knowledge, skills and attitude a student should develop during his/her tenure of study with respect to a specific Programme. The Programme outcome is graded to the level of education and the specific skill sets that are to be attained have been schemed with utmost care.

Programme Outcome at Undergraduate Level:

- Undergraduate students shall be exposed to a new learning atmosphere by way of understanding the concepts and developing in-depth knowledge related to their academic programme.
- Undergraduate students shall be imparted with a complete skill set consisting of analytical, problem solving and critical thinking skills to analyze an individual's strengths and challenges. They shall be equipped to deliver job skills and become skilled professionals in their respective domains.
- Undergraduate students shall be encouraged to indulge themselves in the self-learning process through co-curricular activities, industrial exposures and field training.
- Undergraduate students shall be educated with moral and ethical values to shape them into responsible citizens in society.

Programme Outcome at Postgraduate Level:

- Post graduate students shall be equipped with intense knowledge in their discipline.
- Post Graduate students shall develop specialized skills to plan, analyze and draw conclusions related to their respective field of study.
- Post graduate students will undergo projects and research activities under the guidance of experts to develop knowledge and become experts in their field of study.
- Post graduate students shall be trained to understand and incorporate new technologies in their own discipline and excel in their area of specialization.

Post graduate students shall develop social and ethical responsibility in the transfer of knowledge.

V. Devi 09/08/24
PRINCIPAL
Principal
THIRUTHANGAL NADAR COLLEGE
SELAVAYAL, CHENNAI-600 051.

PROGRAMME :		B.COM GENERAL	
Subject Code	**Subject Name**	**Course Outcomes**	
146C1A	FINANCIAL ACCOUNTING - I	**CO1**	Remember the concept of rectification of errors and Bank reconciliation statements
		CO2	Apply the knowledge in preparing detailed accounts of sole trading concerns
		CO3	Analyse the various methods of providing depreciation
		CO4	Evaluate the methods of calculation of profit
		CO5	Determine the royalty accounting treatment and claims from insurance companies in case of loss of stock.
146C1B	PRINCIPLES OF MANAGEMENT	**CO1**	Demonstrate the importance of principles of management.
		CO2	Paraphrase the importance of planning and decision making in an organization.
		CO3	Comprehend the concept of various authorizes and responsibilities of an organization.
		CO4	Enumerate the various methods of Performance appraisal
		CO5	Demonstrate the notion of directing, co-coordination and control in the management.
146C2A	FINANCIAL ACCOUNTING - II	**CO1**	To evaluate the Hire purchase accounts and Instalment systems
		CO2	To prepare Branch accounts and Departmental Accounts
		CO3	To understand the accounting treatment for admission and retirement in partnership
		CO4	To know Settlement of accounts at the time of dissolution of a firm.
		CO5	To elaborate the role of IFRS
146C2B	BUSINESS LAW	**CO1**	Explain the Objectives and significance of Mercantile law
		CO2	Understand the clauses and exceptions of Indian Contract Act.
		CO3	Explain concepts on performance, breach and discharge of contract.
		CO4	Outline the contract of indemnity and guarantee
		CO5	Explain the various provisions of Sale of Goods Act 1930
246C3A	CORPORATE ACCOUNTING I	**CO1**	Prepare and account for various entries to be passed in case of issue, forfeiture and reissue of shares and compute the liability of underwrites
		CO2	Asses the accounting treatment of issue and redemption of preference shares and debentures
		CO3	Construct Financial Statements applying relevant accounting treatments
		CO4	Compute the value of goodwill and shares under different methods and assess its applicability

		CO5	Integrate theoretical knowledge on all accounting in par with IFRS and IND AS
246C3B	COMPANY LAW	**CO1**	Understand the classification of companies under the act
		CO2	Examine the contents of the Memorandum of Association & Articles of Association
		CO3	Know the qualification and disqualification of Auditors
		CO4	Understand the workings of National Company Law Appellate Tribunal (NCLAT)
		CO5	Analyse the modes of winding up
246C4A	CORPORATE ACCOUNTING – II	**CO1**	Understand the accounting treatment of amalgamation, Internal and external reconstruction
		CO2	Construct Profit and Loss account and Balance Sheet of Banking Companies in accordance in the prescribed format.
		CO3	Synthesize and prepare final accounts of Insurance companies in the prescribed format
		CO4	Give the consolidated accounts of holding companies
		CO5	Preparation of liquidator's final statement of account
246C4B	PRINCIPLES OF MARKETING	**CO1**	Develop an understanding on the role and importance of marketing
		CO2	Apply the 4p's of marketing in their venture
		CO3	Identify the factors determining pricing
		CO4	Use the different Channels of distribution of industrial goods
		CO5	Understand the concept of E-marketing and E-Tailing
346C5A	COST ACCOUNTING – I	**CO1**	Remember and recall the various concepts of cost accounting
		CO2	Demonstrate the preparation and reconciliation of cost sheet.
		CO3	Analyse the various valuation methods of issue of materials.
		CO4	Examine the different methods of calculating labour cost.
		CO5	Critically evaluate the apportionment of Overheads.
346C5B	BANKING LAW AND PRACTICE	**CO1**	Aware of vvarious provision of Banking Regulation Act 1949 applicable to banking companies including cooperative banks
		CO2	Analyse the evolution of Central Banking concept and prevalent Central Banking system in India and their roles and function
		CO3	Gain knowledge about the Central Bank in India, its formation, nationalizing its organization structure, role of bank to government, role in promoting agriculture and industry, role in financial inclusion

		CO4	Evaluate the role of capital fund of commercial banks, objectives and process of Asset securitization etc
		CO5	Define the practical banking systems relationship of bankers and customers, crossing of cheques, endorsement etc.
346C5C	INCOME TAX LAW AND PRACTICE- I	**CO1**	Demonstrate the understanding of the basic concepts and definitions under the Income Tax Act
		CO2	Assess the residential status of an assessee & the incidence of tax.
		CO3	Compute income of an individual under the head salaries.
		CO4	Ability to compute income from house property.
		CO5	Evaluate income from a business carried on or from the practice of a Profession.
346C5D	AUDITING & CORPORATE GOVERNANCE	**CO1**	Define auditing and its process.
		CO2	Compare and contrast essence of internal check and internal control.
		CO3	Identify the role of auditors in companies.
		CO4	Define the concept of Corporate Governance.
		CO5	Appraise the implications of Corporate Social Responsibility
346C6A	COST ACCOUNTING – II	**CO1**	Remember and recall standards in cost accounting
		CO2	Apply the knowledge in contract costing
		CO3	Analyze and assimilate concepts in process costing
		CO4	Understand various bases of classification cost and prepare operating cost statement.
		CO5	Set up standards and analyse variances.
346C6B	MANAGEMENT ACCOUNTING	**CO1**	Remember and recall basics in management accounting
		CO2	Apply the knowledge of preparation of Financial Statements
		CO3	Analyse the concepts relating to fund flow and cash flow
		CO4	Evaluate techniques of budgetary control
		CO5	Formulate criteria for decision making using principles of marginal costing.
346C6C	INCOME TAX LAW AND PRACTICE – II	**CO1**	Formulate criteria for decision making using principles of marginal costing.
		CO2	Apply the knowledge about income from other sources
		CO3	Analyse the set off and carry forward of losses provisions
		CO4	Learn about assessment of individuals

		CO5	Apply procedures learnt about assessment procedures.
PROGRAMME :			**B.COM CORPORATE SECRETARYSHIP**
Subject Code	**Subject Name**	**Course Outcomes**	
118C1A	FINANCIAL ACCOUNTING - I	**CO1**	Remember the concept of rectification of errors and Bank reconciliation statements
		CO2	Apply the knowledge in preparing detailed accounts of sole trading concerns
		CO3	Analyse the various methods of providing depreciation
		CO4	Evaluate the methods of calculation of profit
		CO5	Determine the royalty accounting treatment and claims from insurance companies in case of loss of stock.
118C1B	PRINCIPLES OF MANAGEMENT	**CO1**	Demonstrate the importance of principles of management.
		CO2	Paraphrase the importance of planning and decision making in an organization.
		CO3	Comprehend the concept of various authorizes and responsibilities of an organization.
		CO4	Enumerate the various methods of Performance appraisal
		CO5	Demonstrate the notion of directing, co-coordination and control in the management.
118C2A	FINANCIAL ACCOUNTING - II	**CO1**	To evaluate the Hire purchase accounts and Instalment systems
		CO2	To prepare Branch accounts and Departmental Accounts
		CO3	To understand the accounting treatment for admission and retirement in partnership
		CO4	To know Settlement of accounts at the time of dissolution of a firm.
		CO5	To elaborate the role of IFRS
118C2B	BUSINESS LAW	**CO1**	Explain the Objectives and significance of Mercantile law
		CO2	Understand the clauses and exceptions of Indian Contract Act.
		CO3	Explain concepts on performance, breach and discharge of contract.
		CO4	Outline the contract of indemnity and guarantee
		CO5	Explain the various provisions of Sale of Goods Act 1930
218C3A	CORPORATE ACCOUNTING I	**CO1**	Prepare and account for various entries to be passed in case of issue, forfeiture and reissue of shares and compute the liability of underwrites
		CO2	Asses the accounting treatment of issue and redemption of preference shares and debentures
		CO3	Construct Financial Statements applying relevant accounting treatments

		CO4	Compute the value of goodwill and shares under different methods and assess its applicability
		CO5	Integrate theoretical knowledge on all accounting in par with IFRS and IND AS
218C3B	COMPANY LAW	**CO1**	Understand the classification of companies under the act
		CO2	Examine the contents of the Memorandum of Association & Articles of Association
		CO3	Know the qualification and disqualification of Auditors
		CO4	Understand the workings of National Company Law Appellate Tribunal (NCLAT)
		CO5	Analyse the modes of winding up
218C4A	CORPORATE ACCOUNTING – II	**CO1**	Understand the accounting treatment of amalgamation, Internal and external reconstruction
		CO2	Construct Profit and Loss account and Balance Sheet of Banking Companies in accordance in the prescribed format.
		CO3	Synthesize and prepare final accounts of Insurance companies in the prescribed format
		CO4	Give the consolidated accounts of holding companies
		CO5	Preparation of liquidator's final statement of account
218C4B	PRINCIPLES OF MARKETING	**CO1**	Develop an understanding on the role and importance of marketing
		CO2	Apply the 4p's of marketing in their venture
		CO3	Identify the factors determining pricing
		CO4	Use the different Channels of distribution of industrial goods
		CO5	Understand the concept of E-marketing and E-Tailing
318C5A	COST ACCOUNTING	**CO1**	Understand the meaning of cost accounting and its scope and prepare cost sheets.
		CO2	Analyse the various valuation methods of issue of materials.
		CO3	Examine the different methods of calculating labour cost.
		CO4	Critically evaluate the apportionment of Overheads.
		CO5	Calculate Costing using different techniques
318C5B	BANKING LAW AND PRACTICE	**CO1**	Aware of various provision of Banking Regulation Act 1949 applicable to banking companies including cooperative banks
		CO2	Analyse the evolution of Central Banking concept and prevalent Central Banking system in India and their roles and function

		CO3	Gain knowledge about the Central Bank in India, its formation, nationalizing its organization structure, role of bank to government, role in promoting agriculture and industry, role in financial inclusion
		CO4	Evaluate the role of capital fund of commercial banks, objectives and process of Asset securitization etc
		CO5	Define the practical banking systems relationship of bankers and customers, crossing of cheques, endorsement etc.
318C5C	INCOME TAX LAW AND PRACTICE- I	**CO1**	Demonstrate the understanding of the basic concepts and definitions under the Income Tax Act
		CO2	Assess the residential status of an assessee & the incidence of tax.
		CO3	Compute income of an individual under the head salaries.
		CO4	Ability to compute income from house property.
		CO5	Evaluate income from a business carried on or from the practice of a Profession.
318C5D	AUDITING & CORPORATE GOVERNANCE	**CO1**	Define auditing and its process.
		CO2	Compare and contrast essence of internal check and internal control.
		CO3	Identify the role of auditors in companies.
		CO4	Define the concept of Corporate Governance.
		CO5	Appraise the implications of Corporate Social Responsibility
318C6A	MANAGEMENT ACCOUNTING	**CO1**	Remember and recall basics in management accounting
		CO2	Apply the knowledge of preparation of Financial Statements
		CO3	Analyse the concepts relating to fund flow and cash flow
		CO4	Evaluate techniques of budgetary control
		CO5	Formulate criteria for decision making using principles of marginal costing.
318C6B	INCOME TAX LAW AND PRACTICE – II	**CO1**	Formulate criteria for decision making using principles of marginal costing.
		CO2	Apply the knowledge about income from other sources
		CO3	Analyse the set off and carry forward of losses provisions
		CO4	Learn about assessment of individuals
		CO5	Apply procedures learnt about assessment procedures.

318C6C	INSTITUTIONAL TRAINING	**CO1**	Acquire institutional experience the nature of school as workplace and their associated values, routines and cultures.
		CO2	Demonstrate professional skills that pertain directly to the institutional experience.
		CO3	Analyses the various department activities and their responsibilities
		CO4	Understand the organization structure, layout and to describe the organization's financial statement analysis.
		CO5	Prepare the report based on the training experience.
PROGRAMME :		**B.COM COMPUTER APPLICATION**	
Subject Code	**Subject Name**	**Course Outcomes**	
147C1A	FINANCIAL ACCOUNTING - I	**CO1**	Remember the concept of rectification of errors and Bank reconciliation statements
		CO2	Apply the knowledge in preparing detailed accounts of sole trading concerns
		CO3	Analyse the various methods of providing depreciation
		CO4	Evaluate the methods of calculation of profit
		CO5	Determine the royalty accounting treatment and claims from insurance companies in case of loss of stock.
147C1B	PRINCIPLES OF MANAGEMENT	**CO1**	Demonstrate the importance of principles of management.
		CO2	Paraphrase the importance of planning and decision making in an organization.
		CO3	Comprehend the concept of various authorizes and responsibilities of an organization.
		CO4	Enumerate the various methods of Performance appraisal
		CO5	Demonstrate the notion of directing, co-coordination and control in the management.
147C2A	FINANCIAL ACCOUNTING - II	**CO1**	To evaluate the Hire purchase accounts and Instalment systems
		CO2	To prepare Branch accounts and Departmental Accounts
		CO3	To understand the accounting treatment for admission and retirement in partnership
		CO4	To know Settlement of accounts at the time of dissolution of a firm.
		CO5	To elaborate the role of IFRS
147C2B	BUSINESS LAW	**CO1**	Explain the Objectives and significance of Mercantile law
		CO2	Understand the clauses and exceptions of Indian Contract Act.
		CO3	Explain concepts on performance, breach and discharge of contract.
		CO4	Outline the contract of indemnity and guarantee

		CO5	Explain the various provisions of Sale of Goods Act 1930
247C3A	CORPORATE ACCOUNTING I	**CO1**	Prepare and account for various entries to be passed in case of issue, forfeiture and reissue of shares and compute the liability of underwrites
		CO2	Asses the accounting treatment of issue and redemption of preference shares and debentures
		CO3	Construct Financial Statements applying relevant accounting treatments
		CO4	Compute the value of goodwill and shares under different methods and assess its applicability
		CO5	Integrate theoretical knowledge on all accounting in par with IFRS and IND AS
247C3B	COMPANY LAW	**CO1**	Understand the classification of companies under the act
		CO2	Examine the contents of the Memorandum of Association & Articles of Association
		CO3	Know the qualification and disqualification of Auditors
		CO4	Understand the workings of National Company Law Appellate Tribunal (NCLAT)
		CO5	Analyse the modes of winding up
247C4A	CORPORATE ACCOUNTING – II	**CO1**	Understand the accounting treatment of amalgamation, Internal and external reconstruction
		CO2	Construct Profit and Loss account and Balance Sheet of Banking Companies in accordance in the prescribed format.
		CO3	Synthesize and prepare final accounts of Insurance companies in the prescribed format
		CO4	Give the consolidated accounts of holding companies
		CO5	Preparation of liquidator's final statement of account
247C4B	PRINCIPLES OF MARKETING	**CO1**	Develop an understanding on the role and importance of marketing
		CO2	Apply the 4p's of marketing in their venture
		CO3	Identify the factors determining pricing
		CO4	Use the different Channels of distribution of industrial goods
		CO5	Understand the concept of E-marketing and E-Tailing
347C5A	COST ACCOUNTING – I	**CO1**	Remember and recall the various concepts of cost accounting
		CO2	Demonstrate the preparation and reconciliation of cost sheet.
		CO3	Analyse the various valuation methods of issue of materials.
		CO4	Examine the different methods of calculating labour cost.
		CO5	Critically evaluate the apportionment of Overheads.

347C5B	BANKING LAW AND PRACTICE	**CO1**	Aware of various provision of Banking Regulation Act 1949 applicable to banking companies including cooperative banks
		CO2	Analyse the evolution of Central Banking concept and prevalent Central Banking system in India and their roles and function
		CO3	Gain knowledge about the Central Bank in India, its formation, nationalizing its organization structure, role of bank to government, role in promoting agriculture and industry, role in financial inclusion
		CO4	Evaluate the role of capital fund of commercial banks, objectives and process of Asset securitization etc
		CO5	Define the practical banking systems relationship of bankers and customers, crossing of cheques, endorsement etc.
347C5C	INCOME TAX LAW AND PRACTICE- I	**CO1**	Demonstrate the understanding of the basic concepts and definitions under the Income Tax Act
		CO2	Assess the residential status of an assesse & the incidence of tax.
		CO3	Compute income of an individual under the head salaries.
		CO4	Ability to compute income from house property.
		CO5	Evaluate income from a business carried on or from the practice of a Profession.
347C5D	AUDITING & CORPORATE GOVERNANCE	**CO1**	Define auditing and its process.
		CO2	Compare and contrast essence of internal check and internal control.
		CO3	Identify the role of auditors in companies.
		CO4	Define the concept of Corporate Governance.
		CO5	Appraise the implications of Corporate Social Responsibility
347C6A	COST ACCOUNTING – II	**CO1**	Remember and recall standards in cost accounting
		CO2	Apply the knowledge in contract costing
		CO3	Analyze and assimilate concepts in process costing
		CO4	Understand various bases of classification cost and prepare operating cost statement.
		CO5	Set up standards and analyse variances.
347C6B	MANAGEMENT ACCOUNTING	**CO1**	Remember and recall basics in management accounting
		CO2	Apply the knowledge of preparation of Financial Statements

		CO3	Analyse the concepts relating to fund flow and cash flow
		CO4	Evaluate techniques of budgetary control
		CO5	Formulate criteria for decision making using principles of marginal costing.
347C6C	INCOME TAX LAW AND PRACTICE – II	**CO1**	Formulate criteria for decision making using principles of marginal costing.
		CO2	Apply the knowledge about income from other sources
		CO3	Analyse the set off and carry forward of losses provisions
		CO4	Learn about assessment of individuals
		CO5	Apply procedures learnt about assessment procedures.
PROGRAMME :		**B.COM BANK MANAGEMENT**	
Subject Code	**Subject Name**	**Course Outcomes**	
145C1A	FINANCIAL ACCOUNTING - I	**CO1**	Remember the concept of rectification of errors and Bank reconciliation statements
		CO2	Apply the knowledge in preparing detailed accounts of sole trading concerns
		CO3	Analyse the various methods of providing depreciation
		CO4	Evaluate the methods of calculation of profit
		CO5	Determine the royalty accounting treatment and claims from insurance companies in case of loss of stock.
145C1B	PRINCIPLES OF MANAGEMENT	**CO1**	Demonstrate the importance of principles of management.
		CO2	Paraphrase the importance of planning and decision making in an organization.
		CO3	Comprehend the concept of various authorizes and responsibilities of an organization.
		CO4	Enumerate the various methods of Performance appraisal
		CO5	Demonstrate the notion of directing, co-coordination and control in the management.
145C2A	FINANCIAL ACCOUNTING - II	**CO1**	To evaluate the Hire purchase accounts and Instalment systems
		CO2	To prepare Branch accounts and Departmental Accounts
		CO3	To understand the accounting treatment for admission and retirement in partnership
		CO4	To know Settlement of accounts at the time of dissolution of a firm.
		CO5	To elaborate the role of IFRS
145C2B	BUSINESS LAW	**CO1**	Explain the Objectives and significance of Mercantile law
		CO2	Understand the clauses and exceptions of Indian Contract Act.
		CO3	Explain concepts on performance, breach and discharge of contract.

		CO4	Outline the contract of indemnity and guarantee
		CO5	Explain the various provisions of Sale of Goods Act 1930
245C3A	CORPORATE ACCOUNTING I	**CO1**	Prepare and account for various entries to be passed in case of issue, forfeiture and reissue of shares and compute the liability of underwrites
		CO2	Asses the accounting treatment of issue and redemption of preference shares and debentures
		CO3	Construct Financial Statements applying relevant accounting treatments
		CO4	Compute the value of goodwill and shares under different methods and assess its applicability
		CO5	Integrate theoretical knowledge on all accounting in par with IFRS and IND AS
245C3B	COMPANY LAW	**CO1**	Understand the classification of companies under the act
		CO2	Examine the contents of the Memorandum of Association & Articles of Association
		CO3	Know the qualification and disqualification of Auditors
		CO4	Understand the workings of National Company Law Appellate Tribunal (NCLAT)
		CO5	Analyse the modes of winding up
245C4A	CORPORATE ACCOUNTING – II	**CO1**	Understand the accounting treatment of amalgamation, Internal and external reconstruction
		CO2	Construct Profit and Loss account and Balance Sheet of Banking Companies in accordance in the prescribed format.
		CO3	Synthesize and prepare final accounts of Insurance companies in the prescribed format
		CO4	Give the consolidated accounts of holding companies
		CO5	Preparation of liquidator's final statement of account
245C4B	PRINCIPLES OF MARKETING	**CO1**	Develop an understanding on the role and importance of marketing
		CO2	Apply the 4p's of marketing in their venture
		CO3	Identify the factors determining pricing
		CO4	Use the different Channels of distribution of industrial goods
		CO5	Understand the concept of E-marketing and E-Tailing
345C5A	COST ACCOUNTING – I	**CO1**	Remember and recall the various concepts of cost accounting
		CO2	Demonstrate the preparation and reconciliation of cost sheet.
		CO3	Analyse the various valuation methods of issue of materials.
		CO4	Examine the different methods of calculating labour cost.

		CO5	Critically evaluate the apportionment of Overheads.
345C5B	BANKING LAW AND PRACTICE	**CO1**	Aware of various provision of Banking Regulation Act 1949 applicable to banking companies including cooperative banks
		CO2	Analyse the evolution of Central Banking concept and prevalent Central Banking system in India and their roles and function
		CO3	Gain knowledge about the Central Bank in India, its formation, nationalizing its organization structure, role of bank to government, role in promoting agriculture and industry, role in financial inclusion
		CO4	Evaluate the role of capital fund of commercial banks, objectives and process of Asset securitization etc
		CO5	Define the practical banking systems relationship of bankers and customers, crossing of cheques, endorsement etc.
345C5C	INCOME TAX LAW AND PRACTICE- I	**CO1**	Demonstrate the understanding of the basic concepts and definitions under the Income Tax Act
		CO2	Assess the residential status of an assessee & the incidence of tax.
		CO3	Compute income of an individual under the head salaries.
		CO4	Ability to compute income from house property.
		CO5	Evaluate income from a business carried on or from the practice of a Profession.
345C5D	AUDITING & CORPORATE GOVERNANCE	**CO1**	Define auditing and its process.
		CO2	Compare and contrast essence of internal check and internal control.
		CO3	Identify the role of auditors in companies.
		CO4	Define the concept of Corporate Governance.
		CO5	Appraise the implications of Corporate Social Responsibility
345C6A	COST ACCOUNTING – II	**CO1**	Remember and recall standards in cost accounting
		CO2	Apply the knowledge in contract costing
		CO3	Analyze and assimilate concepts in process costing
		CO4	Understand various bases of classification cost and prepare operating cost statement.
		CO5	Set up standards and analyse variances.
345C6B	MANAGEMENT	**CO1**	Remember and recall basics in management accounting

	ACCOUNTING	**CO2**	Apply the knowledge of preparation of Financial Statements
		CO3	Analyse the concepts relating to fund flow and cash flow
		CO4	Evaluate techniques of budgetary control
		CO5	Formulate criteria for decision making using principles of marginal costing.
345C6C	INCOME TAX LAW AND PRACTICE – II	**CO1**	Formulate criteria for decision making using principles of marginal costing.
		CO2	Apply the knowledge about income from other sources
		CO3	Analyse the set off and carry forward of losses provisions
		CO4	Learn about assessment of individuals
		CO5	Apply procedures learnt about assessment procedures.
PROGRAMME :			**B.COM ACCOUNTING & FINANCE**
Subject Code	**Subject Name**	**Course Outcomes**	
144C1A	FINANCIAL ACCOUNTING - I	**CO1**	Remember the concept of rectification of errors and Bank reconciliation statements
		CO2	Apply the knowledge in preparing detailed accounts of sole trading concerns
		CO3	Analyse the various methods of providing depreciation
		CO4	Evaluate the methods of calculation of profit
		CO5	Determine the royalty accounting treatment and claims from insurance companies in case of loss of stock.
144C1B	PRINCIPLES OF MANAGEMENT	**CO1**	Demonstrate the importance of principles of management.
		CO2	Paraphrase the importance of planning and decision making in an organization.
		CO3	Comprehend the concept of various authorizes and responsibilities of an organization.
		CO4	Enumerate the various methods of Performance appraisal
		CO5	Demonstrate the notion of directing, co-coordination and control in the management.
144C2A	FINANCIAL ACCOUNTING - II	**CO1**	To evaluate the Hire purchase accounts and Instalment systems
		CO2	To prepare Branch accounts and Departmental Accounts
		CO3	To understand the accounting treatment for admission and retirement in partnership
		CO4	To know Settlement of accounts at the time of dissolution of a firm.
		CO5	To elaborate the role of IFRS
144C2B	BUSINESS LAW	**CO1**	Explain the Objectives and significance of Mercantile law
		CO2	Understand the clauses and exceptions of Indian Contract Act.

		CO3	Explain concepts on performance, breach and discharge of contract.
		CO4	Outline the contract of indemnity and guarantee
		CO5	Explain the various provisions of Sale of Goods Act 1930
244C3A	CORPORATE ACCOUNTING I	**CO1**	Prepare and account for various entries to be passed in case of issue, forfeiture and reissue of shares and compute the liability of underwrites
		CO2	Asses the accounting treatment of issue and redemption of preference shares and debentures
		CO3	Construct Financial Statements applying relevant accounting treatments
		CO4	Compute the value of goodwill and shares under different methods and assess its applicability
		CO5	Integrate theoretical knowledge on all accounting in par with IFRS and IND AS
244C3B	COMPANY LAW	**CO1**	Understand the classification of companies under the act
		CO2	Examine the contents of the Memorandum of Association & Articles of Association
		CO3	Know the qualification and disqualification of Auditors
		CO4	Understand the workings of National Company Law Appellate Tribunal (NCLAT)
		CO5	Analyse the modes of winding up
244C4A	CORPORATE ACCOUNTING – II	**CO1**	Understand the accounting treatment of amalgamation, Internal and external reconstruction
		CO2	Construct Profit and Loss account and Balance Sheet of Banking Companies in accordance in the prescribed format.
		CO3	Synthesize and prepare final accounts of Insurance companies in the prescribed format
		CO4	Give the consolidated accounts of holding companies
		CO5	Preparation of liquidator's final statement of account
244C4B	PRINCIPLES OF MARKETING	**CO1**	Develop an understanding on the role and importance of marketing
		CO2	Apply the 4p's of marketing in their venture
		CO3	Identify the factors determining pricing
		CO4	Use the different Channels of distribution of industrial goods
		CO5	Understand the concept of E-marketing and E-Tailing
344C5A	COST ACCOUNTING – I	**CO1**	Remember and recall the various concepts of cost accounting
		CO2	Demonstrate the preparation and reconciliation of cost sheet.
		CO3	Analyse the various valuation methods of issue of materials.

		CO4	Examine the different methods of calculating labour cost.
		CO5	Critically evaluate the apportionment of Overheads.
344C5B	BANKING LAW AND PRACTICE	**CO1**	Aware of vvarious provision of Banking Regulation Act 1949 applicable to banking companies including cooperative banks
		CO2	Analyse the evolution of Central Banking concept and prevalent Central Banking system in India and their roles and function
		CO3	Gain knowledge about the Central Bank in India, its formation, nationalizing its organization structure, role of bank to government, role in promoting agriculture and industry, role in financial inclusion
		CO4	Evaluate the role of capital fund of commercial banks, objectives and process of Asset securitization etc
		CO5	Define the practical banking systems relationship of bankers and customers, crossing of cheques, endorsement etc.
344C5C	INCOME TAX LAW AND PRACTICE- I	**CO1**	Demonstrate the understanding of the basic concepts and definitions under the Income Tax Act
		CO2	Assess the residential status of an assessee & the incidence of tax.
		CO3	Compute income of an individual under the head salaries.
		CO4	Ability to compute income from house property.
		CO5	Evaluate income from a business carried on or from the practice of a Profession.
344C5D	AUDITING & CORPORATE GOVERNANCE	**CO1**	Define auditing and its process.
		CO2	Compare and contrast essence of internal check and internal control.
		CO3	Identify the role of auditors in companies.
		CO4	Define the concept of Corporate Governance.
		CO5	Appraise the implications of Corporate Social Responsibility
344C6A	COST ACCOUNTING – II	**CO1**	Remember and recall standards in cost accounting
		CO2	Apply the knowledge in contract costing
		CO3	Analyze and assimilate concepts in process costing
		CO4	Understand various bases of classification cost and prepare operating cost statement.
		CO5	Set up standards and analyse variances.

344C6B	MANAGEMENT ACCOUNTING	**CO1**	Remember and recall basics in management accounting
		CO2	Apply the knowledge of preparation of Financial Statements
		CO3	Analyse the concepts relating to fund flow and cash flow
		CO4	Evaluate techniques of budgetary control
		CO5	Formulate criteria for decision making using principles of marginal costing.
344C6C	INCOME TAX LAW AND PRACTICE – II	**CO1**	Formulate criteria for decision making using principles of marginal costing.
		CO2	Apply the knowledge about income from other sources
		CO3	Analyse the set off and carry forward of losses provisions
		CO4	Learn about assessment of individuals
		CO5	Apply procedures learnt about assessment procedures.
PROGRAMME :		**B.COM INFORMATION SYSTEM MANAGEMENT**	
Subject Code	**Subject Name**	**Course Outcomes**	
151C1A	FINANCIAL ACCOUNTING - I	**CO1**	Remember the concept of rectification of errors and Bank reconciliation statements
		CO2	Apply the knowledge in preparing detailed accounts of sole trading concerns
		CO3	Analyse the various methods of providing depreciation
		CO4	Evaluate the methods of calculation of profit
		CO5	Determine the royalty accounting treatment and claims from insurance companies in case of loss of stock.
151C1B	PRINCIPLES OF MANAGEMENT	**CO1**	Demonstrate the importance of principles of management.
		CO2	Paraphrase the importance of planning and decision making in an organization.
		CO3	Comprehend the concept of various authorizes and responsibilities of an organization.
		CO4	Enumerate the various methods of Performance appraisal
		CO5	Demonstrate the notion of directing, co-coordination and control in the management.
151C2A	FINANCIAL ACCOUNTING - II	**CO1**	To evaluate the Hire purchase accounts and Instalment systems
		CO2	To prepare Branch accounts and Departmental Accounts
		CO3	To understand the accounting treatment for admission and retirement in partnership
		CO4	To know Settlement of accounts at the time of dissolution of a firm.
		CO5	To elaborate the role of IFRS
151C2B	BUSINESS LAW	**CO1**	Explain the Objectives and significance of Mercantile law

		CO2	Understand the clauses and exceptions of Indian Contract Act.
		CO3	Explain concepts on performance, breach and discharge of contract.
		CO4	Outline the contract of indemnity and guarantee
		CO5	Explain the various provisions of Sale of Goods Act 1930
251C3A	CORPORATE ACCOUNTING I	**CO1**	Prepare and account for various entries to be passed in case of issue, forfeiture and reissue of shares and compute the liability of underwrites
		CO2	Asses the accounting treatment of issue and redemption of preference shares and debentures
		CO3	Construct Financial Statements applying relevant accounting treatments
		CO4	Compute the value of goodwill and shares under different methods and assess its applicability
		CO5	Integrate theoretical knowledge on all accounting in par with IFRS and IND AS
251C3B	COMPANY LAW	**CO1**	Understand the classification of companies under the act
		CO2	Examine the contents of the Memorandum of Association & Articles of Association
		CO3	Know the qualification and disqualification of Auditors
		CO4	Understand the workings of National Company Law Appellate Tribunal (NCLAT)
		CO5	Analyse the modes of winding up
251C4A	CORPORATE ACCOUNTING – II	**CO1**	Understand the accounting treatment of amalgamation, Internal and external reconstruction
		CO2	Construct Profit and Loss account and Balance Sheet of Banking Companies in accordance in the prescribed format.
		CO3	Synthesize and prepare final accounts of Insurance companies in the prescribed format
		CO4	Give the consolidated accounts of holding companies
		CO5	Preparation of liquidator's final statement of account
251C4B	PRINCIPLES OF MARKETING	**CO1**	Develop an understanding on the role and importance of marketing
		CO2	Apply the 4p's of marketing in their venture
		CO3	Identify the factors determining pricing
		CO4	Use the different Channels of distribution of industrial goods
		CO5	Understand the concept of E-marketing and E-Tailing
351C5A	COST ACCOUNTING – I	**CO1**	Remember and recall the various concepts of cost accounting
		CO2	Demonstrate the preparation and reconciliation of cost sheet.

		CO3	Analyse the various valuation methods of issue of materials.
		CO4	Examine the different methods of calculating labour cost.
		CO5	Critically evaluate the apportionment of Overheads.
351C5B	BANKING LAW AND PRACTICE	**CO1**	Aware of various provision of Banking Regulation Act 1949 applicable to banking companies including cooperative banks
		CO2	Analyse the evolution of Central Banking concept and prevalent Central Banking system in India and their roles and function
		CO3	Gain knowledge about the Central Bank in India, its formation, nationalizing its organization structure, role of bank to government, role in promoting agriculture and industry, role in financial inclusion
		CO4	Evaluate the role of capital fund of commercial banks, objectives and process of Asset securitization etc
		CO5	Define the practical banking systems relationship of bankers and customers, crossing of cheques, endorsement etc.
351C5C	INCOME TAX LAW AND PRACTICE- I	**CO1**	Demonstrate the understanding of the basic concepts and definitions under the Income Tax Act
		CO2	Assess the residential status of an assessee & the incidence of tax.
		CO3	Compute income of an individual under the head salaries.
		CO4	Ability to compute income from house property.
		CO5	Evaluate income from a business carried on or from the practice of a Profession.
351C5D	AUDITING & CORPORATE GOVERNANCE	**CO1**	Define auditing and its process.
		CO2	Compare and contrast essence of internal check and internal control.
		CO3	Identify the role of auditors in companies.
		CO4	Define the concept of Corporate Governance.
		CO5	Appraise the implications of Corporate Social Responsibility
351C6A	COST ACCOUNTING – II	**CO1**	Remember and recall standards in cost accounting
		CO2	Apply the knowledge in contract costing
		CO3	Analyze and assimilate concepts in process costing
		CO4	Understand various bases of classification cost and prepare operating cost statement.

		CO5	Set up standards and analyse variances.
351C6B	MANAGEMENT ACCOUNTING	**CO1**	Remember and recall basics in management accounting
		CO2	Apply the knowledge of preparation of Financial Statements
		CO3	Analyse the concepts relating to fund flow and cash flow
		CO4	Evaluate techniques of budgetary control
		CO5	Formulate criteria for decision making using principles of marginal costing.
351C6C	INCOME TAX LAW AND PRACTICE – II	**CO1**	Formulate criteria for decision making using principles of marginal costing.
		CO2	Apply the knowledge about income from other sources
		CO3	Analyse the set off and carry forward of losses provisions
		CO4	Learn about assessment of individuals
		CO5	Apply procedures learnt about assessment procedures.
PROGRAMME :		**BBA**	
Subject Code	**Subject Name**	**Course Outcomes**	
150C1A	Principles of Management	**CO1**	Describe nature, scope, role, levels, functions and approaches of management
		CO2	Apply planning and decision making in management
		CO3	Identify organization structure and various organizing techniques
		CO4	Understand Direction, Co-ordination & Control mechanisms
		CO5	Relate and infer ethical practices of organisation.
150C1B	Accounting for Managers I	**CO1**	Prepare Journal, ledger, trial balance and cash book
		CO2	Classify errors and making rectification entries
		CO3	Prepare final accounts with adjustments
		CO4	To understand Hire Purchase system
		CO5	Prepare single and double entry system of accounting.
150C2A	MARKETING MANAGEMENT	**CO1**	To list and identify the core concepts of Marketing and its mix.
		CO2	To sketch the market segmentation, nature of product, PLC
		CO3	To analyze the appropriate pricing methods
		CO4	To determine the importance of various media
		CO5	To assess the sales force and applications of digital marketing
150C2B	Accounting for Managers II	**CO1**	Interpret cost sheet & write comments.

		CO2	Compare cost, management & financial accounting
		CO3	Analyze the various ratio and compare it with standards to assess deviations
		CO4	Estimate budget and use budgetary control
		CO5	Evaluate marginal costing and its components
250C3A	ORGANIZATIONAL BEHAVIOUR	**CO1**	To define Organisational Behaviour, Understand the opportunity through OB.
		CO2	To apply self-awareness, motivation, leadership and learning theories at workplace.
		CO3	To analyze the complexities and solutions of group behaviour
		CO4	To impact and bring positive change in the culture of the organisaiton.
		CO5	To create a congenial climate in the organization.
250C3B	Financial Management	**CO1**	Understand the basics of finance and roles of finance manager
		CO2	Evaluate Capital structure & Cost of capital
		CO3	Evaluate Capital budgeting
		CO4	Assessing dividends
		CO5	Appraise Working Capital
250C4A	Business Environment	**CO1**	To understand the concepts of Business Environment.
		CO2	To apply knowledge in the business and strategic decisions.
		CO3	To analyze the importance of business in various social groups.
		CO4	To evaluate the types of economic environment and its impact on business.
		CO5	To construct and assess the environment for real-time business
250C4B	BUSINESS REGULATORY FRAME WORK	**CO1**	Explain Indian Contracts Act
		CO2	Understand Sales of goods act and Contract of Agency
		CO3	Understand Indian Companies Act 1956
		CO4	Understand Consumer Protection Act – RTI
		CO5	Understand Cyber law
350C5A	HUMAN RESOURCE MANAGEMENT	**CO1**	Explain the concepts, functions and process of HRM
		CO2	Examine the selection and placement process
		CO3	Evaluate the training and performance appraisal
		CO4	Understand the employee engagement and compensation
		CO5	Understand the recent trends in HR

350C5B	Research Methodology	**CO1**	Understand the concepts and principles of Research
		CO2	Comprehend and decide the usage of design and formulate hypothesis
		CO3	Analyze data collection sources and tools
		CO4	Summarize and establish solutions through data analysis
		CO5	Compare and justify the process of writing and organizing a research report.
350C5C	Business Taxation	**CO1**	To define and understand the basic concepts of tax.
		CO2	To Examine and apply GST rules in real-time business situations.
		CO3	To analyze the elements of GST mechanism in India.
		CO4	To evaluate the rules of Income Tax and methods of valuation for customs.
		CO5	To prepare the needed documents under GST Compliance.
350C5D:	PROJECT WORK	**CO1**	Gain knowledge about Research Project
		CO2	Increase knowledge on research problem
		CO3	Improve practice in review of literature
		CO4	Gain knowledge on Data Collection and Analysis
		CO5	Be Proficient in Project Preparation
350C6A	Entrepreneurship Development	**CO1**	To understand the concepts of Entrepreneurship development.
		CO2	To apply knowledge in the business plans and implementation.
		CO3	To analyze the various analyses of business in setting up of enterprises.
		CO4	To create the awareness about various schemes and subsidies of government for entrepreneurial development.
		CO5	To evaluate and assess the various problems and remedies of entrepreneurship
350C6B	SERVICES MARKETING	**CO1**	To define and understand the concepts of Services Marketing.
		CO2	To Examine and apply Marketing Mix in Service Marketing.
		CO3	To analyze and design various strategies in the field of Services Marketing.
		CO4	To evaluate the role of delivering Quality Service.
		CO5	To design the tools of Marketing
350C6C	Production & Materials Management	**CO1**	Provide comprehensive outlook on basic concepts, and practices of production
		CO2	Identify right plant location and plant layout of factory
		CO3	Know work study & method study, its procedure & quality control techniques in production.

		CO4	Outline inventory control concepts and its replenishment to manage inventory
		CO5	Discuss purchase management procedure and identify vendor rating mechanisms
PROGRAMME :		**BCA**	
Subject Code	**Subject Name**	**Course Outcomes**	
120C11	PYTHON PROGRAMMING PRACTICAL	**CO1**	To understand the problem solving approaches
		CO2	To understand the problem solving approaches
		CO3	To practice various computing strategies for Python-based solutions to real world problems
		CO4	To use Python data structures - lists, tuples, dictionaries.
		CO5	To do input/output with files in Python.
120C1A	PYTHON PROGRAMMING THEORY	**CO1**	Develop & execute simple Python Programs
		CO2	Write simple Python programs using conditionals and looping for solving problems
		CO3	Decompose a Python program into functions
		CO4	Represent compound data using Python lists, tuples, dictionaries etc.
		CO5	Read and write data from/to files in Python programs
120C21	Object Oriented Programming using C++ Practical	**CO1**	Design and create classes. Implement Stream I/O as appropriate.
		CO2	Design appropriate data members and member functions.
		CO3	Implement functions, friend functions, static members, constructors and compile-time polymorphism.
		CO4	Implement inheritance, run-time polymorphism and destructors.
		CO5	Implement templates and exceptions. Use STL class library. Implement File I/O.
120C2A	Object Oriented Programming using C++ Theory	**CO1**	Explain the various basic concepts of Object-orientation.
		CO2	Write programs to implement static binding
		CO3	Write programs to implement inheritance and dynamic binding
		CO4	Write programs to implement templates and exception handling and learn how to use STL class library.
		CO5	Write programs implementing File and Stream I/O.
220C31	DATA STRUCTURES PRACTICAL	**CO1**	Implement data structures using C++
		CO2	Implement various types of linked lists and their applications
		CO3	Implement Tree Traversals

		CO4	Implement various algorithms in C++
220C3A	DATA STRUCTURES THEORY	**CO1**	To introduce the concepts of Data structures and to understand simple linear data structures.
		CO2	Learn the basics of stack data structure, its implementation and application
		CO3	Use the appropriate data structure in context of solution of given problem and demonstrate a familiarity with major data structures.
		CO4	To introduce the basic concepts of algorithms
		CO5	To give clear idea on algorithmic design paradigms like Divide and conquer and Backtracking,
220C41	JAVA PROGRAMMING PRACTICAL	**CO1**	Code, debug and execute Java programs to solve the given problems
		CO2	Implement multi-threading and exception-handling
		CO3	Implement functionality using String and String Buffer classes
		CO4	Demonstrate Event Handling.
		CO5	Create applications using Swing and AWT
220C4A	JAVA PROGRAMMING THEORY	**CO1**	Understand the basic Object-oriented concepts. Implement the basic constructs of Core Java
		CO2	Implement inheritance, packages, interfaces and exception handling of Core Java.
		CO3	Implement multi-threading and I/O Streams of Core Java
		CO4	Implement AWT and Event handling
		CO5	Use Swing to create GUI.
320C51	Web Technology Practical	**CO1**	On the completion of this laboratory course the students ought to
		CO2	Obtain knowledge and develop application programs using Python.
		CO3	Create dynamic Web applications such as content management, user registration, and ecommerce using PHP and to understand the ability to post and publish a PHP website.
		CO4	Develop a MySQL database and establish connectivity using MySQL.
320C5A	OPERATING SYSTEM	**CO1**	Understand the structure and functions of Operating System
		CO2	Compare the performance of Scheduling Algorithms
		CO3	Analyse resource management techniques
320C5B	Relational Database Management System	**CO1**	Describe basic concepts of database system
		CO2	Design a Data model and Schemas in RDBMS
		CO3	Competent in use of SQL

		CO4	Analyse functional dependencies for designing robust Database
320C5C	Web Technology	**CO1**	Understand the general concepts of PHP scripting language for the development of Internet websites.
		CO2	Understand the basic functions of MySQL database program and XML concepts
		CO3	Learn the relationship between the client side and the server side scripts.
320C61	R-Programming Practical	**CO1**	To understand the problem solving approaches
		CO2	To learn the basic programming constructs in R Programming
		CO3	To practice various computing strategies for R Programming -based solutions to real world problems
		CO4	To use R Programming data structures - lists, tuples, dictionaries.
		CO5	To do input/output with files in R Programming
320C6A	R-Programming	**CO1**	To understand the problem solving approaches
		CO2	To learn the basic programming constructs in R Programming
		CO3	To learn the basic programming constructs in R Programming
		CO4	To use R Programming data structures - lists, tuples, dictionaries
		CO5	To do input/output with files in R Programming.
320C6B	Advanced Networking	**CO1**	To Understand the basics of Computer Network architecture, OSI and TCP/IP reference models
		CO2	To gain knowledge on Telephone systems and Satellite communications
		CO3	To impart the concept of Elementary data link protocols
		CO4	To analyze the characteristics of Routing and Congestion control algorithms
		CO5	To understand network security and define various protocols such as FTP, HTTP, Telnet, DNS
PROGRAMME :			**B.Sc Computer Science**
Subject Code	**Subject Name**	**Course Outcomes**	
125C11	PYTHON PROGRAMMING PRACTICAL	**CO1**	To understand the problem solving approaches
		CO2	To understand the problem solving approaches
		CO3	To practice various computing strategies for Python-based solutions to real world problems
		CO4	To use Python data structures - lists, tuples, dictionaries.

		CO5	To do input/output with files in Python.
125C1A	PYTHON PROGRAMMING THEORY	**CO1**	Develop & execute simple Python Programs
		CO2	Write simple Python programs using conditionals and looping for solving problems
		CO3	Decompose a Python program into functions
		CO4	Represent compound data using Python lists, tuples, dictionaries etc.
		CO5	Read and write data from/to files in Python programs
125C21	Introduction to Computer Architecture and Microprocessor Practical	**CO1**	Remember the Basic binary codes and their conversions. Binary concepts are used in Microprocessor programming and provide a good understanding of the architecture of 8085.
		CO2	Understanding the 8085-instruction set and their classifications, enables the students to write the programs easily on their own using different logic.
		CO3	Applying different types of instructions to convert binary codes and analysing the outcome. The instruction set is applied to develop programs on multibyte arithmetic operations.
		CO4	Analyse how peripheral devices are connected to 8085 using Interrupts and DMA controller.
125C2A	Introduction to Computer Architecture and Microprocessor	**CO1**	Remember the Basic binary codes and their conversions. Binary concepts are used in Microprocessor programming and provide a good understanding of the architecture of 8085.
		CO2	Understanding the 8085 instruction set and their classifications, enables the students to write the programs easily on their own using different logic.
		CO3	Applying different types of instructions to convert binary codes and analysing the outcome. The instruction set is applied to develop programs on multibyte arithmetic operations.
		CO4	Analyse how peripheral devices are connected to 8085 using Interrupts and DMA controller.
225C31	JAVA PROGRAMMING PRACTICAL	**CO1**	Code, debug and execute Java programs to solve the given problems
		CO2	Implement multi-threading and exception-handling
		CO3	Implement functionality using String and String Buffer classes
		CO4	Demonstrate Event Handling.
		CO5	Create applications using Swing and AWT
225C3A	JAVA PROGRAMMING THEORY	**CO1**	Understand the basic Object-oriented concepts. Implement the basic constructs of Core Java
		CO2	Implement inheritance, packages, interfaces and exception handling of Core Java.
		CO3	Implement multi-threading and I/O Streams of Core Java
		CO4	Implement AWT and Event handling

		CO5	Use Swing to create GUI.
225C41	Data Structures and Algorithms Practical	**CO1**	Implement data structures using Java
		CO2	Implement various types of linked lists and their applications
		CO3	Implement Tree Traversals
		CO4	Implement various algorithms in Java
		CO5	Implement different sorting and searching algorithms
225C4A	Data Structures and Algorithms	**CO1**	To introduce the concepts of Data structures and to understand simple linear data structures.
		CO2	Learn the basics of stack data structure, its implementation and application
		CO3	Use the appropriate data structure in context of solution of given problem and demonstrate a familiarity with major data structures.
		CO4	To introduce the basic concepts of algorithms
		CO5	To give clear idea on algorithmic design paradigms like Divide and conquer and Backtracking,
325C51	Operating System Practical	**CO1**	Understand the process management policies and scheduling process by CPU.
		CO2	Analyse the memory management and its allocation policies.
		CO3	To evaluate the requirement for process synchronization.
325C52	Relational Database Management System Practical	**CO1**	Implement the DDL, DML Commands and Constraints
		CO2	Create, Update and query on the database.
		CO3	Design and Implement simple project with Front End and Back End.
325C5A	OPERATING SYSTEM	**CO1**	Understand the structure and functions of Operating System
		CO2	Compare the performance of Scheduling Algorithms
		CO3	Analyse resource management techniques
325C5B	Relational Database Management System	**CO1**	Describe basic concepts of database system
		CO2	Design a Data model and Schemas in RDBMS
		CO3	Competent in use of SQL
		CO4	Analyse functional dependencies for designing robust Database
325C61	Programming in ASP.NET Practical	**CO1**	To identify and understand the goals and objectives of the .NET framework and ASP.NET with C# language.
		CO2	To develop web application using various controls.

		CO3	To analyse C# programming techniques in developing web applications
		CO4	To assess a Web application using Microsoft ADO.NET.
		CO5	To develop a software to solve real-world problems using ASP.NET
325C6A	Programming in ASP.NET	**CO1**	To identify and understand the goals and objectives of the .NET framework and ASP.NET with C# language.
		CO2	To develop web application using various controls
		CO3	To analyse C# programming techniques in developing web applications.
		CO4	To assess a Web application using Microsoft ADO.NET.
		CO5	To develop a software to solve real-world problems using ASP.NET
PROGRAMME :		**B.Sc Computer Science with Artificial Intelligence**	
Subject Code	**Subject Name**	**Course Outcomes**	
126C11	PYTHON PROGRAMMING PRACTICAL	**CO1**	To understand the problem solving approaches
		CO2	To understand the problem solving approaches
		CO3	To practice various computing strategies for Python-based solutions to real world problems
		CO4	To use Python data structures - lists, tuples, dictionaries.
		CO5	To do input/output with files in Python.
126C1A	PYTHON PROGRAMMING THEORY	**CO1**	Develop & execute simple Python Programs
		CO2	Write simple Python programs using conditionals and looping for solving problems
		CO3	Decompose a Python program into functions
		CO4	Represent compound data using Python lists, tuples, dictionaries etc.
		CO5	Read and write data from/to files in Python programs
126C21	JAVA PROGRAMMING PRACTICAL	**CO1**	Code, debug and execute Java programs to solve the given problems
		CO2	Implement multi-threading and exception-handling
		CO3	Implement functionality using String and String Buffer classes
		CO4	Demonstrate Event Handling.
		CO5	Create applications using Swing and AWT
126C2A	JAVA PROGRAMMING THEORY	**CO1**	Understand the basic Object-oriented concepts. Implement the basic constructs of Core Java
		CO2	Implement inheritance, packages, interfaces and exception handling of Core Java.
		CO3	Implement multi-threading and I/O Streams of Core Java

		CO4	Implement AWT and Event handling
		CO5	Use Swing to create GUI.
226C31	DATA STRUCTURES PRACTICAL	**CO1**	Implement data structures using C++
		CO2	Implement various types of linked lists and their applications
		CO3	Implement Tree Traversals
		CO4	Implement various algorithms in C++
226C3A	DATA STRUCTURES THEORY	**CO1**	To introduce the concepts of Data structures and to understand simple linear data structures.
		CO2	Learn the basics of stack data structure, its implementation and application
		CO3	Use the appropriate data structure in context of solution of given problem and demonstrate a familiarity with major data structures.
		CO4	To introduce the basic concepts of algorithms
		CO5	To give clear idea on algorithmic design paradigms like Divide and conquer and Backtracking,
226C41	Prolog Practical	**CO1**	Demonstrate Logic Programming Paradigm, Prolog execution models, Prolog's basic and advanced pro log concepts such as LIST, CUT, and Fail using illustrative programming examples.
		CO2	Convert world knowledge into FOPL formula and construct well-crafted prolog programmes of moderate size
		CO3	Apply truth functional propositional Logic(PL) and first order predicate logic (FOPL) to world knowledge
		CO4	Describe the basic predicates to manipulate list data structure and sorting algorithms using PROLOG programming
226C4A	Introduction to Artificial Intelligence	**CO1**	Demonstrate fundamental understanding of the history of artificial intelligence (AI) and its foundations.
		CO2	Apply basic principles of AI in solutions that require problem solving, inference, perception, knowledge representation, and learning.
		CO3	Demonstrate awareness and a fundamental understanding of various applications of AI techniques
		CO4	Demonstrate proficiency developing applications in Prolog.

		CO5	Demonstrate an ability to share in discussions of AI, its current scope and limitations, and societal implications
326C51	Computer Vision Practical	**CO1**	Implement Spatial Operations in Image Processing
		CO2	Implement the Image Gradients and Edge Detection Techniques
		CO3	Implement Extraction of desired features
		CO4	Implement object detection
326C52	Natural Language Processing Practical	**CO1**	Describe the concepts of morphology, syntax, semantics, discourse & pragmatics of natural language.
		CO2	Demonstrate understanding of the relationship between NLP and statistics & machine learning.
		CO3	Discover various linguistic and statistical features relevant to the basic NLP task, namely, spelling correction, morphological analysis, parts-of-speech tagging, parsing and semantic analysis.
		CO4	Develop systems for various NLP problems with moderate complexity
326C5B	Natural Language Processing	**CO1**	Describe the fundamental concepts and techniques of natural language processing.
		CO2	Distinguish among the various techniques, taking into account the assumptions, strengths, and weaknesses of each.
		CO3	Use appropriate descriptions, visualizations, and statistics to communicate the problems and their solutions.
		CO4	Analyse large volume text data generated from a range of real-world applications.
326C61	Machine Learning Practical	**CO1**	Design and evaluate the unsupervised models through python in built functions.
		CO2	Evaluate the machine learning model algorithms by python programming.
		CO3	Design and apply various reinforcement algorithms to solve real time complex problems. .
		CO4	Design and develop the code for the recommender system using Natural Language processing
326C6A	Machine Learning	**CO1**	Implement different machine learning algorithm techniques.
		CO2	Apply the algorithms to a real-world problem, optimize the models learned and report on the expected accuracy that can be achieved by applying the models.
		CO3	Apply appropriate data sets to the Machine Learning algorithms.
		CO4	Identify and apply Machine Learning algorithms to solve real world problems.

326C6B	Fuzzy Logic	**CO1**	Identify and describe soft computing techniques and their roles in building intelligent Machines.
		CO2	Apply fuzzy logic and reasoning to handle uncertainty and solve engineering problems
		CO3	Recognize the feasibility of applying a soft computing methodology for a particular Problem.
PROGRAMME :		**B.Sc Software Applications**	
Subject Code	**Subject Name**	**Course Outcomes**	
141C11	PYTHON PROGRAMMING PRACTICAL	**CO1**	To understand the problem solving approaches
		CO2	To understand the problem solving approaches
		CO3	To practice various computing strategies for Python-based solutions to real world problems
		CO4	To use Python data structures - lists, tuples, dictionaries.
		CO5	To do input/output with files in Python.
141C1A	PYTHON PROGRAMMING THEORY	**CO1**	Develop & execute simple Python Programs
		CO2	Write simple Python programs using conditionals and looping for solving problems
		CO3	Decompose a Python program into functions
		CO4	Represent compound data using Python lists, tuples, dictionaries etc.
		CO5	Read and write data from/to files in Python programs
141C21	Object Oriented Programming using C++ Practical	**CO1**	Design and create classes. Implement Stream I/O as appropriate.
		CO2	Design appropriate data members and member functions.
		CO3	Implement functions, friend functions, static members, constructors and compile-time polymorphism.
		CO4	Implement inheritance, run-time polymorphism and destructors.
		CO5	Implement templates and exceptions. Use STL class library. Implement File I/O.
141C2A	Object Oriented Programming using C++ Theory	**CO1**	Explain the various basic concepts of Object-orientation.
		CO2	Write programs to implement static binding
		CO3	Write programs to implement inheritance and dynamic binding
		CO4	Write programs to implement templates and exception handling and learn how to use STL class library.
		CO5	Write programs implementing File and Stream I/O.
241C31	Web Technology Practical	**CO1**	On the completion of this laboratory course the students ought to

		CO2	Obtain knowledge and develop application programs using Python.
		CO3	Create dynamic Web applications such as content management, user registration, and ecommerce using PHP and to understand the ability to post and publish a PHP website.
		CO4	Develop a MySQL database and establish connectivity using MySQL.
241C3A	Web Technology	**CO1**	Understand the general concepts of PHP scripting language for the development of Internet websites.
		CO2	Understand the basic functions of MySQL database program and XML concepts
		CO3	Learn the relationship between the client side and the server side scripts.
241C41	JAVA PROGRAMMING PRACTICAL	**CO1**	Code, debug and execute Java programs to solve the given problems
		CO2	Implement multi-threading and exception-handling
		CO3	Implement functionality using String and String Buffer classes
		CO4	Demonstrate Event Handling.
		CO5	Create applications using Swing and AWT
241C4A	JAVA PROGRAMMING THEORY	**CO1**	Understand the basic Object-oriented concepts. Implement the basic constructs of Core Java
		CO2	Implement inheritance, packages, interfaces and exception handling of Core Java.
		CO3	Implement multi-threading and I/O Streams of Core Java
		CO4	Implement AWT and Event handling
		CO5	Use Swing to create GUI.
341C51	Relational Database Management System Practical	**CO1**	Implement the DDL, DML Commands and Constraints
		CO2	Create, Update and query on the database.
		CO3	Design and Implement simple project with Front End and Back End.
341C5A	Relational Database Management System	**CO1**	Describe basic concepts of database system
		CO2	Design a Data model and Schemas in RDBMS
		CO3	Competent in use of SQL
		CO4	Analyse functional dependencies for designing robust Database
341C52	Programming in ASP.NET Practical	**CO1**	To identify and understand the goals and objectives of the .NET framework and ASP.NET with C# language.
		CO2	To develop web application using various controls.
		CO3	To analyse C# programming techniques in developing web applications

		CO4	To assess a Web application using Microsoft ADO.NET.
		CO5	To develop a software to solve real-world problems using ASP.NET
341C5B	Programming in ASP.NET	**CO1**	To identify and understand the goals and objectives of the .NET framework and ASP.NET with C# language.
		CO2	To develop web application using various controls
		CO3	To analyse C# programming techniques in developing web applications.
		CO4	To assess a Web application using Microsoft ADO.NET.
		CO5	To develop a software to solve real-world problems using ASP.NET
341C61	R-Programming Practical	**CO1**	To understand the problem solving approaches
		CO2	To learn the basic programming constructs in R Programming
		CO3	To practice various computing strategies for R Programming -based solutions to real world problems
		CO4	To use R Programming data structures - lists, tuples, dictionaries.
		CO5	To do input/output with files in R Programming
341C6A	R-Programming	**CO1**	To understand the problem solving approaches
		CO2	To learn the basic programming constructs in R Programming
		CO3	To learn the basic programming constructs in R Programming
		CO4	To use R Programming data structures - lists, tuples, dictionaries
		CO5	To do input/output with files in R Programming.
PROGRAMME :		**B.Sc Chemistry**	
Subject Code	**Subject Name**	**Course Outcomes**	
124C11	Quantitative Inorganic Estimation (titrimetry) and Inorganic Preparations	**CO1**	explain the basic principles involved in titrimetric analysis and inorganic preparations.
		CO2	compare the methodologies of different titrimetric analysis.
		CO3	calculate the concentrations of unknown solutions in different ways and develop the skill to estimate the amount of a substance present in a given solution.
		CO4	assess the yield of different inorganic preparations and identify the end point of various titrations.
124C1A	GENERAL CHEMISTRY-I	**CO1**	explain the atomic structure, wave particle duality of matter, periodic properties bonding, and properties of compounds.

		CO2	classify the elements in the periodic table, types of bonds, reaction intermediates electronic effects in organic compounds, types of reagents.
		CO3	apply the theories of atomic structure, bonding, to calculate energy of a spectral transition, Δx, Δp electronegativity, percentage ionic character and bond order.
		CO4	evaluate the relationship existing between electronic configuration, bonding, geometry of molecules and reactions; structure reactivity and electronic effects
		CO5	construct MO diagrams, predict trends in periodic properties, assess the properties of elements, and explain hybridization in molecules, nature of H – bonding and organic reaction mechanisms.
124C21	QUALITATIVE ORGANIC ANALYSIS AND PREPARATION OF ORGANIC COMPOUNDS	**CO1**	observe the physical state, odour , colour and solubility of the given organic compound.
		CO2	identify the presence of special elements and functional group in an unknown organic compound performing a systematic analysis.
		CO3	compare mono and dicarboxylic acids, primary, secondary and tertiary amines, mono and diamides, mono and polyhydric phenols, aldehyde and ketone, reducing and nonreducing sugars and explain the reactions behind it.
		CO4	exhibit a solid derivative with respect to the identified functionalgroup.
124C2A	GENERAL CHEMISTRY-II	**CO1**	explain the concept of acids, bases and ionic equilibria; periodic properties of s and p block elements, preparation and properties of aliphatic and aromatic hydrocarbons
		CO2	discuss the periodic properties of sand p- block elements, reactions of aliphatic and aromatic hydrocarbons and strength of acids
		CO3	classify hydrocarbons, types of reactions, acids and bases, examine the properties s and p-block elements, reaction mechanisms of aliphatic and aromatic hydrocarbons
		CO4	explain theories of acids, bases and indicators, buffer action and important compounds of s-blockelements
		CO5	assess the application of hard and soft acids indicators, buffers, compounds of s and pblock elements and hydrocarbons
224C31	QUALITATIVE INORGANIC ANALYSIS	**CO1**	acquire knowledge on the systematic analysis of Mixture of salts.
		CO2	identify the cations and anions in the unknown substance.
		CO3	identify the cations and anions in the soil and water and to test the quality of water.

		CO4	assess the role of common ion effect and solubility product
224C3A	GENERAL CHEMISTRY -III	**CO1**	Explain the kinetic properties of gases by using mathematical concepts. structure determinations.
		CO2	describe the physical properties of liquid and solids; identify various types of crystals with respect to its packing and apply the XRD method for crystal
		CO3	investigate the radioactivity, nuclear energy and it's production, also the nuclear waste management.
		CO4	write the nomenclature, physical & chemical properties and basic mechanisms of halo organic compounds and alcohols.
		CO5	investigate the named organic reactions related to phenol; explain the preparation and properties of aromatic alcohol including thiol
224C41	PHYSICAL CHEMISTRY PRACTICALS	**CO1**	describe the principles and methodology for the practical work
		CO2	explain the procedure, data and methodology for the practical work.
		CO3	apply the principles of electrochemistry, kinetics for carrying out the practical work.
		CO4	demonstrate laboratory skills for safe handling of the equipment and chemicals
224C4A	GENERAL CHEMISTRY-IV	**CO1**	explain the terms and processes in thermodynamics; discuss the various laws of thermodynamics and thermo chemical calculations.
		CO2	discuss the second law of thermodynamics and its application to heat engine; discuss third law and its application on heat capacity measurement.
		CO3	investigate the chemistry of transition elements with respect to various periodic properties and group wise discussions.
		CO4	discuss the fundamental organic chemistry of ethers, epoxides and carbonyl compounds including named organic reactions.
		CO5	discuss the chemistry and named reactions related to carboxylic acids and their derivatives; discuss chemistry of active methylene compounds, halogen substituted acids
324C51	GRAVIMETRIC ANALYSIS PRACTICAL	**CO1**	Describe the principles and methodology for the practical work.
		CO2	Explain the procedure, data and methodology for the practical work
		CO3	Apply the principles of phase rule and electrochemistry for carrying out the practical work

		CO4	Demonstrate laboratory skills for safe handling of the equipment and chemicals
324C5A	ORGANIC CHEMISTRY – I	**CO1**	assign RS notations to chirals and EZ notations to olefins and explain conformations of ethane and butane.
		CO2	explain preparation and properties of aromatic and aliphatic nitro compounds and amines
		CO3	explain colour and constitution of dyes and food additives
		CO4	discuss preparation and properties of five membered heterocycles like pyrrole, furan and thiophene
		CO5	discuss preparation and properties of six membered heterocycles like pyridine, quinoline and isoquinoline
324C5B	INORGANIC CHEMISTRY – I	**CO1**	explain isomerism, Werner's Theory and stability of chelate complexes
		CO2	discuss crystal field theory, magnetic properties and spectral properties of complexes.
		CO3	explain preparation and properties of metal carbonyls
		CO4	give a comparative account of the characteristics of lanthanoids and actinoids
		CO5	explain properties and uses of inorganic polymers of silicon, sulphur, boron and phosphorous
324C5C	PHYSICAL CHEMISTRY –I	**CO1**	explain Gibbs and Helmholtz free energy functions, partial molar quantities and Ellingham's
		CO2	apply the concepts of chemical kinetics to predict the rate of the reaction and order of the reaction, demonstrate the effect of temperature on reaction rate, and the significance of free energy and entropy of activation.
		CO3	compare chemical and physical adsorption, Freundlich and Langmuir adsorption isotherms, and differentiate between homogenous and heterogeneous catalysis.
		CO4	demonstrate the types and characteristics of colloids, preparation of sols and emulsions, and determine the molecular weights of macromolecules.
		CO5	utilize the concepts of photochemistry in fluorescence, phosphorescence, chemiluminescence and color perception of vision.
324C6A	ORGANIC CHEMISTRY - II	**CO1**	explain isolation and properties of alkaloids and terpenes
		CO2	explain preparation and reactions of mono and disachharides

		CO3	classify biomolecules and natural products based on their structure, properties, reactions and uses.
		CO4	explain molecular rearrangements like benzidine, Hoffmann etc.,
		CO5	preparation and properties of organolithium compounds
324C6B	INORGANIC CHEMISTRY – II	**CO1**	ability to explain the importance of tracer elements on biological system.
		CO2	explain the metal ion transport, Bohr effect, Na, K, Ca pump.
		CO3	explain the function of Vitamin B12, Zn-Cu enzyme, ferredoxin, cluster enzymes.
		CO4	classification and structure of silicates.
		CO5	explain the manufacture of refractories, explosives, paints and pigments
324C6C	PHYSICAL CHEMISTRY-II	**CO1**	construct the phase diagram for one component and two component systems, explain the properties of freezing mixture, component with congruent melting points and solid solutions
		CO2	apply the concepts of chemical equilibrium in dissociation of PCl5, N2O4 and formation of HI, NH3, SO3 and decomposition of calcium carbonate. Demonstrate important principles such as Le chatelier principle, van't Hoff reaction isotherm and ClausiusClayperon equation.
		CO3	Identify an appropriate distillation method for the separation of binary liquid mixtures such as azeotropic mixtures, partially miscible mixtures and immiscible liquids.
		CO4	Explain the significance of Arrhenius theory, Debye-Huckel theory, Onsager equation and Kohlrausch's law in conductance.
		CO5	Construct electrochemical cell with the help of electrochemical series and calculate cell EMF. Demonstrate the applications of EMF and significance of potentiometric titrations.
PROGRAMME :			**B.Sc Mathematics**
Subject Code	**Subject Name**	**Course Outcomes**	
134C1A	ALGEBRA & TRIGONOMETRY	**CO1**	Classify and Solve reciprocal equations
		CO2	Find the sum of binomial, exponential and logarithmic series
		CO3	Find Eigen values, eigen vectors, verify Cayley – Hamilton theorem and diagonalize a given matrix
		CO4	Expand the powers and multiples of trigonometric functions in terms of sine and cosine

		CO5	Determine relationship between circular and hyperbolic functions and the summation of trigonometric series
134C1B	DIFFERENTIALCALCULUS	**CO1**	Find the nth derivative, form equations involving derivatives and apply Leibnitz formula
		CO2	Find the partial derivative and total derivative coefficient
		CO3	Determine maxima and minima of functions of two variables and to use the Lagrange's method of undetermined multipliers
		CO4	Find the envelope of a given family of curves
		CO5	Find the evolutes and involutes and to find the radius of curvature using polar co-ordinates
134C2A	ANALYTICAL GEOMETRY (Two & Three Dimensions)	**CO1**	Find pole, polar for conics, diameters, conjugate diameters for ellipse and hyperbola
		CO2	Find the polar equations of straight line and circle, equations of chord, tangent and normal and to find the asymptotes of hyperbola
		CO3	Explain in detail the system of Planes
		CO4	Explain in detail the system of Straight lines
		CO5	Explain in detail the system of Spheres
134C2B	INTEGRAL CALCULUS	**CO1**	Determine the integrals of algebraic, trigonometric and logarithmic functions and to find the reduction formulae
		CO2	Evaluate double and triple integrals and problems using change of order of integration
		CO3	Solve multiple integrals and to find the areas of curved surfaces and volumes of solids of revolution
		CO4	Explain beta and gamma functions and to use them in solving problems of integration
		CO5	Explain Geometric and Physical applications of integral calculus
234C3A	VECTOR CALCULUS AND APPLICATIONS	**CO1**	Find the derivative of vector and sum of vectors, product of scalar and vector point function and to determine derivatives of scalar and vector products
		CO2	Applications of the operator 'del' and to Explain soleonidal and ir-rotational vectors
		CO3	Solve simple line integrals
		CO4	Solve surface integrals and volume integrals
		CO5	Verify the theorems of Gauss, Stoke's and Green's (Two Dimension)
234C3B	DIFFERENTIAL EQUATIONS AND	**CO1**	Determine solutions of homogeneous equations, non-homogeneous equations of degree one in two variables, solve Bernoulli's equations and exact differential equations

	APPLICATIONS	**CO2**	Find the solutions of equations of first order but not of higher degree and to determine particular integrals of algebraic, exponential, trigonometric functions and their products
		CO3	Find solutions of simultaneous linear differential equations, linear equations of second order and to find solutions using the method of variations of parameters
		CO4	Form a PDE by eliminating arbitrary constants and arbitrary functions, find complete, singular and general integrals, to solve Lagrange's equations
		CO5	Explain standard forms and Solve Differential equations using Charpit's method
234C4A	INDUSTRIAL MATHEMATICS – RESOURCE MANAGEMENT TECHNIQUES	**CO1**	Understand Fomulation of Linear Programming Problem and solving LPP using Graphical and Simplex Method.
		CO2	Get skilled to solve transportation problem and sequencing problem.
		CO3	Understand simulation techniques.
		CO4	Construct Shewhart control charts and use variable control charts to monitor process performance.
		CO5	Design and implement acceptance sampling plans for attributes and variables.
234C4B	ELEMENTS OF MATHEMATICAL ANALYSIS	**CO1**	Explain in detail about sets and functions, equivalence and countability and the LUB axiom
		CO2	Explain Sequence and Subsequence of real numbers and to find the limit of sequence to test for convergent, divergent, bounded and monotone sequences
		CO3	Explain the operations on convergent and divergent sequences and to explain the concepts of limit superior and limit inferior and the notion of Cauchy sequences
		CO4	Classify the series of real numbers and the alternating series and their convergence and divergence, the conditional convergence and absolute convergence and solve problems on convergence of the sequences
		CO5	Explain about the metric spaces and functions continuous on a Metric space
334C5A	ABSTRACT ALGEBRA	**CO1**	Explain groups, subgroups and cyclic groups
		CO2	Explain about Normal subgroup, Quotient groups, Homomorphisms and Automorphisms and verify the functions for homomorphism and automorphism properties
		CO3	Explain Permutation groups and apply Cayley's theorem to problems
		CO4	Explain Rings, Ideals and Quotient Rings and examine their structure

		CO5	Discuss about the field of quotient of an integral domain and to Explain in detail about Euclidean Rings
334C5B	REAL ANALYSIS	**CO1**	Explain the concepts of Continuous and Discontinuous functions, open and close sets, Connectedness, Completeness and Compactness
		CO2	Explain the concepts of bounded and totally bounded sets, continuity of inverse functions and Uniform continuity
		CO3	Define the sets of measure zero, to Explain about the existence and properties of Riemann integral
		CO4	Explain the concept of differentiability and to Explain Rolle's theorem, Law of mean, and Fundamental theorem of calculus
		CO5	Explain the point wise and uniform convergence of sequence of function and to derive the Taylor's theorem
334C5C	MATHEMATICAL MODELLING	**CO1**	Explain simple situations requiring Mathematical Modelling and to Determine the characteristics of such models
		CO2	Model using differential equations in-terms of linear growth and Decay models
		CO3	Model using systems of ordinary differential equations of first order, to discuss about various models under the categories 'Epidemics' and 'Medicine'
		CO4	Explain in detail about difference equations
		CO5	Model using difference equations
334C6A	LINEAR ALGEBRA	**CO1**	Acquire a detailed knowledge about vector spaces and subspaces
		CO2	Explain the concepts of Linear Dependence, Linear Independence, Bases and Dimension of basis
		CO3	Explain the concept of Linear Transformations, their Matrix representation and the notion of dual spaces
		CO4	Find the Eigen values and Eigen vectors, to apply the concepts for diagonalisation
		CO5	Explain about Inner product and norms and to apply Gram Schmidt Orthogonalization Process to problems on inner product spaces
334C6B	COMPLEX ANALYSIS	**CO1**	Explain about analytic functions, their differentiation and continuity and to verify the Harmonic functions using analyticity conditions

		CO2	Explain the concept of Conformal mappings and mappings by linear transformations and linear fractional transformation
		CO3	Explain about the integrations of functions over simply and multiply connected domains and to derive the Cauchy integral formula, Liouvlle's theorem, Fundamental theorem of Algebra and Maximum Module Principle
		CO4	Find the convergence the sequences and series, to derive Taylor's and Laurent's series
		CO5	Find the nature of singularities, to find the residue of a given function at a given singular point, to Explain about zeros and poles and to evaluate real improper integrals (Excluding poles on the real axis)
334C6C	MECHANICS	**CO1**	Define Resultant, Component of a Force, Coplanar forces, like and unlike parallel forces, Equilibrium of a Particle, Limiting equilibrium of a particle on an inclined plane.
		CO2	Define Moment of a force and Couple with examples. Define Parallel Forces and Forces acting along a Triangle, Solve problems on frictional forces
		CO3	Define work, energy, power, rectilinear motions under varying forces. Define Simple Harmonic Motion and find its Geometrical representation.
		CO4	Define Projectile, impulse, impact and laws of impact. Prove that the path of a projectile is a parabola. Find the direct and oblique impact of smooth elastic spheres
		CO5	Define central orbits, explain conic as centered orbits and solve problems related to central orbits
PROGRAMME :			**B.Sc Plant Biology & Biotechnology**
Subject Code	**Subject Name**	**Course Outcomes**	
139C11	PLANT DIVERSITY – I: ALGAE Practical I	**CO1**	Recall and identify algae using key identification characters.
		CO2	Demonstrate practical skills in preparation of fresh mount and identification of algal forms from algal mixture.
		CO3	Describe the internal structure of algae prescribed in the syllabus.
		CO4	Decipher the algal diversity in fresh/marine water and their economic significance.
		CO5	Evaluate the various techniques used to culture algae for commercial purposes.
139C1A	PLANT DIVERSITY I	**CO1**	Relate to the structural organization, reproduction and significance of algae.

	ALGAE	**CO2**	Demonstrate knowledge in understanding the various life cycle patterns and the fundamental concepts in algal growth
		CO3	Explain the benefits of various algal technologies on the ecosystem
		CO4	Compare and contrast the thallus organization and modes of reproduction in algae.
		CO5	Determine the emerging areas of Algal Biotechnology for identifying commercial potentials of algal products and their uses.
139C21	PLANT DIVERSITY – II: FUNGI, BACTERIA, VIRUSES, PLANT PATHOLOGY AND LICHENS –Practical II	**CO1**	Identify microbes, fungi and lichens using key identifying characters
		CO2	Develop practical skills for culturing and cultivation of fungi.
		CO3	Identify and select suitable control measures for the common plant diseases.
		CO4	Analyze the characteristics of microbes, fungi and plant pathogens
		CO5	Access the useful role of fungi in agriculture and pharmaceutical industry.
139C2A	PLANT DIVERSITY – II: FUNGI, BACTERIA, VIRUSES, PLANT PATHOLOGY AND LICHENS	**CO1**	Recognize the general characteristics of microbes, fungi and lichens and disease symptoms.
		CO2	Develop an understanding of microbes, fungi and lichens and appreciate their adaptive strategies based on structural organization.
		CO3	Identify the common plant diseases, according to geographical locations and device control measures.
		CO4	Analyze the emerging trends in fungal biotechnology with special reference to agricultural and pharmaceutical applications.
		CO5	Determine the economic importance of microbes, fungi and lichens.
239C31	PLANT DIVERSITY III BRYOPHYTES AND PTERIDOPHYTES - PRACTICAL-III	**CO1**	Recognize the major groups of Non-vascular and Vascular cryptogams
		CO2	Describe the structure of Bryophytes and Pteridophytes forms prescribed in the syllabus.
		CO3	.Identify and illustrate the morphological and anatomical features of bryophytes and Pteridophytes
		CO4	Develop comprehensiv e skills in sectioning and micro preparation.
		CO5	Interpret the significance of reproductive structures in Bryophytes and Pteridophytes
239C3A	PLANT DIVERSITY-III BRYOPHYTES AND PTERIDOPHYTES	**CO1**	Recognize morphological variations of Bryophytes and Pteridophytes.
		CO2	Explain the anatomy and reproduction of Bryophytes and Pteridophytes.
		CO3	Compare and contrast the variations in the internal cellular organization, gametophyte and sporophyte of Bryophytes and Pteridophytes.

		CO4	Decipher the stages of plant evolution and their transition to land habitat.
		CO5	Access the useful role of Bryophytes and Pteridophytes.
239C41	PLANT DIVERSITY IV GYMNOSPERMS, PALEOBOTANY AND EVOLUTION - PRACTICAL-IV	**CO1**	Analyze and observe and record the morphological features of selected species of Gymnosperms
		CO2	Describe the structure of fossil forms prescribed in the syllabus.
		CO3	Identify and Illustrate the morphological and anatomical features of gymnosperms.
		CO4	Develop comprehensive skills in sectioning and micro preparation.
		CO5	Interpret the significance of reproductive structures in gymnosperms.
239C4A	PLANT DIVERSITY IV GYMNOSPERMS, PALEOBOTANY AND EVOLUTION	**CO1**	Relate to the general characteristics of Gymnosperms and fossil forms
		CO2	Explain about the morphology and anatomy Gymnosperms.
		CO3	Compare and contrast the reproductive structures of Gymnosperms & fossil forms.
		CO4	Analyze the anatomy and reproduction Gymnosperms along with their ecological and economic importance.
		CO5	Determine the various fossilization methods and their significance in pale botany.
339C51	PLANT MORPHOLOGY, TAXONOMY AND ECONOMIC BOTANY-PRACTICAL-V	**CO1**	Recognize the distinguishing plant morphological characters.
		CO2	Identify locally available plants to their respective families.
		CO3	Develop comprehensive skills in field identification, collection of specimens, writing technical description, botanical drawings and herbaria preparation
		CO4	Construct floral diagram and write floral formula for a given flower.
		CO5	Validate the plant specimen by analyzing and dissecting the vegetative and floral characters.
339C52	PRACTICAL-VI Plant Anatomy and Embryology, Cell Biology, Genetics and Plant Breeding	**CO1**	Identify the structure of cell organelles and stages of cell division.
		CO2	Classify the types of stomata and ovules.
		CO3	Classify the types of stomata and ovules.
		CO4	Perform free hand sectioning of plant materials and decipher the internal tissue organization
		CO5	Interpret the given genetic data to develop genetic map based on the principles of Mendelian inheritance and gene interaction
339C5A	PLANT MORPHOLOGY, TAXONOMY AND ECONOMIC BOTANY	**CO1**	Define the concepts in plant morphology and rules of IUCN in botanical nomenclature.
		CO2	Classify systems of plant classification and recognize the importance of herbarium and virtual herbarium.

		CO3	Describe the core concepts of economic Botany and relate its applications in human life.
		CO4	Analyze the characters of the families according to the Bentham and Hooker's system of classification.
		CO5	Assess terms and concepts related to Phylogenetic Systematics.
339C5B	PLANT ANATOMY AND EMBRYOLOGY	**CO1**	Relate to the fundamental concepts of plant anatomy and embryology.
		CO2	Describe the internal tissue organization of various plant organs.
		CO3	Elucidat the stages of normal and abnormal secondary growth.
		CO4	Compare the structural organization of flower in relation to the process of pollination and fertilization.
		CO5	Access the various anatomical adaptations in plants.
339C5C	CELL BIOLOGY, GENETICS AND PLANT BREEDING	**CO1**	Enumerate the structure and functions of cells, cellular structures and organelles.
		CO2	Explain about cell cycle, cell division and laws of inheritance with suitable examples.
		CO3	Elucidate concepts of sex determination and sex linked inheritance.
		CO4	Analyze the importance of genes interactions at population and evolutionary levels.
		CO5	Develop conceptual understanding of plant genetic resources, plant breeding,
339C61	Plant Ecology, Phytogeography, Plant Biotechnology and Molecular Biology, Plant Physiology and Plant Biochemistry	**CO1**	Relate to the distribution and adaptions of plants pertaining to their habitat
		CO2	Demonstrate skills in green planning and callus culture.
		CO3	Elucidate the basic principles involved in the plant physiology and biochemistry experiments.
		CO4	Appreciate the structure and functions of DNA and RNA.
		CO5	Estimate the biochemical components and determine the factors controlling photosynthesis and transpiration of plants.
339C6A	PLANT ECOLOGY AND PHYTOGEOGRAPHY	**CO1**	Relate to the significance of the biotic and abiotic components of the ecosystems and energy flow.
		CO2	Summarize the phyto geographical division of India.
		CO3	Explain the implication of pollution on the environment
		CO4	Analyze the implications of functional and behavioral ecology in natural and man-made areas, biodiversity and conservation.
		CO5	Develop mitigations for the effective conservation of biodiversity
339C6B	PLANT BIOTECHNOLOGY	**CO1**	Recognize the fundamentals concepts of plant biotechnology and genetic engineering.

	AND MOLECULAR BIOLOGY	**CO2**	Explain various steps in transcription, protein synthesis and protein modification.
		CO3	Elucidate gene cloning and evaluate different methods of gene transfer.
		CO4	Analyze the major concerns and applications of transgenic technology.
		CO5	Develop their competency on different types of plant tissue culture.
339C6C	PLANT PHYSIOLOGY AND PLANT BIOCHEMISTRY	**CO1**	Relate to water relation of plants with respect to various physiological phenomenon.
		CO2	Explain the process and significance of photosynthesis and respiration
		CO3	Elucidate properties of nutrients and their deficiency symptoms in plants.
		CO4	Analyze the biological role of plant growth regulators, carbohydrates, proteins, lipids, nucleic acids and enzymes
		CO5	Decipher the phenomenon of seed dormancy and germination in plants.