



S P Mandali's
R. A. PODAR COLLEGE OF COMMERCE AND ECONOMICS
(EMPOWERED AUTONOMOUS)
Matunga, Mumbai-400019

Syllabus and Question paper pattern
for
Bachelor of Science (Finance and Artificial Intelligence)

Syllabus as per National Education Policy 2020
To be implemented from Academic Year 2026- 2027

College Website: www.rapodar.ac.in



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Syllabus and Question paper pattern
for
Bachelor of Science (Finance and Artificial Intelligence)
First Year
Semester I and II

Syllabus as per National Education Policy 2020
To be implemented from Academic Year 2026- 2027

College Website: www.rapodar.ac.in

Bachelor of Science(Finance and Artificial Intelligence) B.Sc.(F&AI) Programme
Syllabus as per National Education Policy 2020
Course Structure F.Y.BSc (F&AI) (Level 4.5)
(To be implemented from Academic Year 2026-27)

No. of Courses	Course Codes	Semester I	Credits	No. of Courses	Course Codes	Semester II	Credits
1	Major (06 credits)			1	Major (06 credits)		
1.A	Mandatory			1.A	Mandatory		
1.A. a	PUI101101	Financial Accounting and Business Insights	03	1.A. a	PUI102101	Applied Financial Analysis	03
1.A. b	PUI101102	Python Programming	03	1.A. b	PUI102102	Artificial Intelligence	03
2	Minor			2	Minor		
2. A. a	PUG201101	Micro Economics - I	03	2. A. a	PUG202101	Macro Economics - I	03
3	General Elective (GE)/ Open Elective (OE)			3	General Elective (GE)/ Open Elective (OE)		
3. A. a	PUI301101	Quantitative Techniques I	03	3. A. a	PUI302101	Quantitative Techniques II	03
4	Vocational & Skill Enhancement Courses (VSEC)			4	Vocational & Skill Enhancement Courses (VSEC)		
4. A	Vocational Skill course			4. A	Vocational Skill course		
4. A. a		-		4. A. a	PUB402101	Intellectual Property Rights	02
4. B	Skill Enhancement Courses (SEC)			4. B	Skill Enhancement Courses (SEC)		
4. B. a	PUB401101	Office Automation I	02	4. B. a	PUB402103	Office Automation II	02
5	Ability Enhancement Course/Value Enhancement Course			5	Ability Enhancement Course/Value Enhancement Course		
5. A.	Ability Enhancement Course			5. A.	Ability Enhancement Course		
5. A. a	PUB501101	Language and Literature I	03	5. A. a	PUB502103	Language and Literature II	03
5. B	Value Enhancement Course (VEC)			5. B	Value Enhancement Course (VEC)		
5. B. a	PUI501101	Corporate Finance	03	5. B. a	PUI502101	Personal Financial Planning	03
5. C	Indian Knowledge System(IKS)						
5. C. a	PUA501103	Indian Traditional Approach in Conservation and Sustainability	02			-	
Cumulative Credits			22	Cumulative Credits			22

SEMESTER I

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
(With effect from the Academic Year 2026-2027)
Semester I

1.Major	
1.A.a Financial Accounting and Business Insights	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	Provide a foundational understanding of financial accounting principles, concepts, and the accounting cycle.
CObj 2	Enable students to record, classify, and summarize business transactions using the double-entry system.
CObj 3	Develop skills in preparing subsidiary books, cash books, ledger accounts, and trial balance.
CObj 4	Equip students with the ability to prepare financial statements such as Trading, Profit & Loss Account, and Balance Sheet.
CObj 5	Help students understand and apply necessary adjustments in final accounts.
CObj 5	Familiarize students with bank reconciliation statements and rectification of accounting errors.
CObj 5	Develop knowledge of capital and revenue classification of expenditures and receipts.
CObj 5	Introduce students to financial statement analysis techniques for business decision-making.
CObj 5	Enable interpretation of financial data using comparative, common-size, and ratio analysis.
CObj 5	Build analytical skills for evaluating financial performance and supporting managerial decisions.
Course outcomes	
COout 1	Explain the basic concepts, principles, and conventions of accounting and their application in business.
COout 2	Record business transactions using the double-entry system and prepare journal, ledger, and trial balance.
COout 3	Prepare subsidiary books and cash books for various types of transactions.
COout 4	Construct Trading and Profit & Loss Accounts and Balance Sheets with necessary adjustments.
COout 5	Apply adjustments such as depreciation, accrued income, prepaid expenses, and outstanding expenses in final accounts.
COout 5	Prepare Bank Reconciliation Statements and rectify accounting errors effectively.

COut 5	Classify transactions into capital and revenue expenditures and receipts with justification.
COut 5	Analyze financial statements using comparative, common-size, and trend analysis techniques.
COut 5	Compute and interpret various financial ratios related to liquidity, profitability, and solvency.
COut 5	Evaluate financial information to support managerial decision-making and business performance assessment.

Financial Accounting and Business Insights		
Sr. No.	Modules	No. of Lectures
1	Fundamentals of Financial Accounting	15
2	Preparation of Financial Statements	15
3	Business Insights through Financial Statements	15
Total No. of Lectures		45

Sr. No	Modules
1.	Fundamentals of Financial Accounting
	<ul style="list-style-type: none"> ● Introduction to Accounting – Meaning, Objectives, and Functions ● Accounting Concepts, Conventions, and Principles ● Double Entry System and Accounting Cycle ● Journal, Ledger, and Trial Balance ● Preparation of Subsidiary Books and Cash Book
2.	Preparation of Financial Statements
	<ul style="list-style-type: none"> ● Preparation of Trading and Profit & Loss Account and Balance Sheet ● Adjustments in Final Accounts (Depreciation, Outstanding and Prepaid Expenses, Accrued Income) ● Bank Reconciliation Statement ● Rectification of Errors ● Capital and Revenue Expenditure and Receipts
3.	Business Insights through Financial Statements
	<ul style="list-style-type: none"> ● Introduction to Financial Statement Analysis ● Comparative and Common-size Statements ● Ratio Analysis: Liquidity, Profitability, and Solvency Ratios ● Trend Analysis and Interpretation of Results ● Managerial Decision-making using Accounting Information

Major Course I***Question Paper Pattern (Academic Year: 2026-2027)*****Financial Accounting and Business Insights****Internal Examination & Semester End Examination – 100 Marks****A] Internals-40 Marks**

Method of evaluation	Marks
Written Test	15
Written Test	15
Assignment	10
TOTAL	40

B] Semester End Examination (SEE)- 60 Marks

Maximum Marks 60

Duration : 2 Hours

Note:

- (1) All questions are compulsory, subject to internal choice.
- (2) Draw diagrams wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Attempt any four from Q1, Q2, Q3, Q4, Q5

Question No.	Particulars (Nature of Questions)	Marks
Q-1	Practical Question	15
Q-2	Practical Question	15
Q-3	Practical Question	15
Q-4	Practical Question	15
Q-5	Short notes	15
	Total	75

Reference Books:

Sr. No.	Title of the Book	Author(s)	Year of Publication	Area Covered
1	Financial Accounting	V. Rajasekaran & R. Lalitha	2011	Fundamentals, accounting cycle
2	Introduction to Accountancy	T. S. Grewal	Latest Edition	Basic concepts, journal, ledger
3	Financial Accounting: A South Asian Perspective	Robert W. Ingram, Thomas Albright, Bruce Baldwin	2016	Concepts, financial statements
4	Financial Accounting for Management	Ambrish Gupta	2009	Financial statements, adjustments
5	Financial Accounting for Managers	T. P. Ghosh	2011	Practical accounting, reporting
6	Accounting: Text and Cases	Robert N. Anthony & David F. Hawkins	Multiple Editions	Accounting concepts & applications
7	Business Analysis and Valuation Using Financial Statements	Krishna G. Palepu & Paul M. Healy	2015	Financial statement analysis
8	Financial Statement Analysis & Reporting	Mohan Rao	2011	Ratio, trend, comparative analysis
9	Total Management by Ratios	Rushikesh Bhattacharya	Latest Edition	Ratio analysis, decision-making

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
(With effect from the Academic Year 2026-2027)
Semester I

1.Major	
1.A.b Python Programming	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	Learn Programming fundamentals using Python
CObj 2	Understand the concepts and usage data types, variables, operators and Control Statement
CObj 3	Learn about using arrays, strings, lists and Dictionaries.
CObj 4	Learn about Numpython and Pandas in Python.
Course outcomes	
COout 1	Learner will able to apply various data types including, string, array list,tuple and dictionary.
COout 2	Learners will able to use regular expressions to perform complex operations in less code.
COout 3	Learners will able to Work with user input to create function and interactive programs
COout 4	Learners will able to build basic programs using fundamental programming constructs like variables, conditional logic, looping, and functions
COout 5	Learners will able to use Arrays in Data structures
COout 5	Learners able to understand and interpret the fundamental Python syntax and semantics and be fluent in the use of Python control flow statements.
COout 5	Learners will able to apply to implement Loops ,break and continuous statement for Python Programs
COout 5	Learners will apply the use of functions and represent Compound data using Lists, Tuples and Dictionaries
COout 5	Learners will able to use Numpy concepts in Python program
COout 5	Learners will apply data manipulation with Pandas

Python Programming		
Sr. No.	Modules	No. of Lectures
1	Introduction to Python Language	15
2	Control Statements, Functions, Arrays, Strings	15
3	Lists and Tuples, Dictionaries, Regular Expressions, NumPy, Pandas	15
Total No. of Lectures		45

Sr. No	Modules
1.	Introduction to Python Language
	<p>Overview, Features of Python, Execution of a Python Program, Innards of Python, Frozen Binaries, Python Interpreter,</p> <p>Comparison of Python with C and Java, Installing Python, Writing & Executing, IDLE</p> <p>Data Types, Variables And Other Basic Elements: Comments, Docstrings, Data types-Numeric, Compound, Boolean, Dictionary, Sets, Mapping, Basic Elements of Python, Variables</p> <p>Input and Output Operations: Input Function, Output Statements, Command Line Arguments Operators: Arithmetic operators, Assignment operators, Unary minus operator, Relational operators, Logical operators, Bitwise operators, Membership operators, Identity operators, Precedence of Operators, Associativity of Operators</p>
2.	Control Statements, Functions, Arrays, Strings
	<p>Control Statements, Loop Statement, break Statement, continue Statement, return Statement</p> <p>Functions: Defining & Calling a Function, Returning Results, Returning Multiple Values, Built-in Functions, Parameters and Arguments, Recursive Functions, Anonymous or Lambda Functions</p> <p>Arrays: Creating Arrays, Indexing and Slicing, Basic Array Operations, Arrays Processing, Mathematical Operations on Array, Aliasing Arrays, Slicing and Indexing in NumPy Arrays, Basic Slicing. Advanced Indexing. Dimensions of Arrays, Attributes of an Array</p>

	Creating Strings, Functions of Strings, Working with Strings, Length of String, Indexing & Slicing, Repeating & Concatenation of Strings, Checking Membership, Comparing Strings, Removing Spaces, Finding Substrings, Counting Substrings, Strings are Immutable, Splitting and Joining Strings, Changing Case, Checking Starting and Ending of a String, Sorting & Searching in the Strings, Formatting the Strings, Working with Characters
3.	Lists and Tuples, Dictionaries, Regular Expressions, NumPy, Pandas
	<p>Lists, List Functions and Methods, List Operations, Tuples Dictionaries: Creating a Dictionary, Operators in Dictionary, Dictionary Methods, Using for Loop with Dictionaries, Operations on Dictionaries, Ordered Dictionaries</p> <p>Regular Expressions: What is a Regular Expression? Sequence Characters in Regular Expressions, Quantifiers in Regular Expressions, Special Characters in Regular Expressions, Using Regular Expression on Files, Retrieving Information from an HTML File.</p> <p>Introduction to NumPy: Understanding Data Types in Python, The Basics of NumPy Arrays, Computation on NumPy. Data Manipulation with Pandas: Introducing Pandas Objects, Data Indexing and Selection, Operating on Data in Pandas</p>

Major Course I

Question Paper Pattern (Academic Year: 2026-2027)

Python Programming

Internal Examination & Semester End Examination – 100 Marks

A] Internals-40 Marks

Method of evaluation	Mark
Practical Work	20
Viva Voce	10
Journal	10
TOTAL	40

Practical's to be conducted	
1	Introduction to Python language

	<p>Write a Python program to explore various data types including numeric types, Boolean types and compound types.</p> <p>Write a Python program to perform Input and Output Operations.</p> <p>Write a Python program to demonstrate looping in python and use of break statement and continue statement</p>
2	Functions
	<p>Write a Python program to define and use functions</p> <p>Write a Python program to demonstrate the use of Built-in Functions.</p> <p>Write a Python Program to implement Lambda Functions.</p>
3	Arrays and String
	<p>Write a Python Program to implement arrays for storing homogeneous data items.</p> <p>Apply indexing and slicing operations to access elements of array.</p> <p>Write a Python Program to demonstrate operations and properties of string data types.</p> <p>Write a Python Program implement and demonstrate the use of Membership operators and Identity operators</p> <p>Write a Python Program to implement NumPy for handling multidimensional arrays.</p>
4	List and Tuples
	<p>Write a Python Program to create list, apply various functions to it.</p> <p>Write a Python Program to demonstrate concept of aliasing and cloning.</p> <p>Write a Python Program to implement tuples for storing data. Verify the immutability property on tuples.</p>
5	Dictionaries and Sets
	<p>Write a Python Program to implement Dictionary and operations on dictionaries</p> <p>Write a Python Program to create sets and various operations on it.</p>

B| Semester End Examination (SEE)- 60 Marks

Maximum Marks: 60

Duration : 2

Hours Note:

- (1) All questions are compulsory, subject to internal choice.
- (2) Draw diagrams wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Attempt any four from Q1, Q2, Q3, Q4, Q5

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1	Attempt any four of the following. A. Theory / Case study/ concept-based question B. Theory / Case study/ concept-based question C. Theory / Case study/ concept-based question D. Theory / Case study/ concept-based question E. Theory / Case study/ concept-based question	25	20
Q-2	Attempt any four of the following. A. Theory / Case study/ concept-based question B. Theory / Case study/ concept-based question C. Theory / Case study/ concept-based question D. Theory / Case study/ concept-based question E. Theory / Case study/ concept-based question	25	20
Q-3	Attempt any four of the following. A. Theory / Case study/ concept-based question B. Theory / Case study/ concept-based question C. Theory / Case study/ concept-based question D. Theory / Case study/ concept-based question E. Theory / Case study/ concept-based question	25	20
	Total	75	60

Books and References:					
Sr. No.	Title	Author/s	Publisher	Edition	Year
1.	Programming through Python	M. T. Savaliya, R.KMaurya, G.M Magar	Staredu Solutions	1	2018
2.	Python Data Science Handbook	Jake VanderPlas	O'Reilly Media	1	2016
3.	Let Us Python	Y. Kanetkar,	BPB	1	2019
4.	Programming in Python3	Mark Summerfield	Pearson Education	2	2018
5.	Learning Python	Lutz M	O'Reilly-Shroff	5	2013
6.	Beginning Python	Magnus Lie Hetland	Apress	2	2009
7.	Star Python	Star Certification	Star Certification	1	2018

**Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
(With effect from the Academic Year 2026-2027)**

Minor

Semester I

2. Minor	
2.A.a. Micro Economics I	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To understand the basic principles of economics, demand and supply analysis, elasticity, and price determination.
CObj 2	To examine consumer behavior using cardinal and ordinal approaches, including equilibrium and demand derivation.
CObj 3	To understand production functions, laws of returns, and cost concepts in short run and long run.
Course Outcomes	
COut 1	Students will be able to analyze market demand and supply, measure elasticity, and explain equilibrium price determination and resource allocation.
COut 2	Students will be able to evaluate consumer equilibrium, analyze income and substitution effects, and derive demand curves using indifference curve analysis.
COut 3	Students will be able to analyze production behavior, determine optimal input combinations, and evaluate cost-output relationships.

Modules at a Glance

Micro Economics I		
Sr. No.	Modules	No. of Lectures
1	Principle of Economics	15
2	Consumer Behavior Theory	15
3	Production Decisions and Cost Analysis	15
Total No. of Lectures:		45

Sr. No.	Modules
1	Principle of Economics
	<ul style="list-style-type: none"> ● The ten Principles of Economics ● Thinking like an Economist ● Scope and Importance micro economics- Basic economic relations- Functional relation, equations. ● The Basics of market demand, market supply, elasticity of demand and elasticity of supply, measurement, significance ● Process of determination of equilibrium price, effects of changes in demand and supply on the equilibrium price, How Prices allocate resources
2	Consumer Behavior Theory
	<ul style="list-style-type: none"> ● The myth of the rational consumer ● Cardinal utility approach, Relation between MU and Price, Ordinal Utility theory: (Indifference curve approach): Consumer's preferences; Indifference curves; Budget line; Consumer's equilibrium ● Income and substitution effect, Price effect and Price consumption curve- Derivation of Demand Curve from PCC. ● Separation of Price effect into income effect and substitution effect for normal goods, inferior goods and Giffen goods
3	Production Decisions and Cost Analysis

	<ul style="list-style-type: none"> ● Production function: short run analysis with Law of Variable Proportions ● Production function with two variable inputs- isoquants, ridge lines and least cost combination of inputs, long run production function and Laws of Returns to Scale, Economies and diseconomies of Scale. ● Types of Cost: accounting cost and economic cost, implicit and explicit cost, social and private cost, historical cost and replacement cost, sunk cost and incremental cost -fixed and variable cost - total, average and marginal cost ● Cost Output Relationship in the short Run (hypothetical numerical problems to be discussed) & Long Run cost function.
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Minor Course

Question Paper Pattern (Academic Year: 2026-2027)

Financial Economics I

Internal Examination & Semester End Examination – 100 Marks

A] Internals-40 Marks

Method of evaluation	Marks
Assignment – Annual Report of Reserve Bank of India and other financial entities	20
Case study analysis/ Project	20
TOTAL	40

B| Semester End Examination (SEE)- 60 Marks

Maximum Marks: 60

Duration : 2

Hours Note:

- All questions are compulsory, subject to internal choice.
- Draw diagrams wherever necessary.
- Figures to the right indicate full marks.

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1	Attempt any four of the following. Theory / Case study/ Concept-based question Theory / Case study/ Concept-based question Theory / Case study/ Concept-based question Theory / Case study/ Concept-based question Theory / Case study/ Concept-based question	25	20
Q-2	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question E. Theory / Case study/ Concept-based question	25	20
Q-3	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question E. Theory / Case study/ Concept-based question	25	20
	Total	75	60

Reference Books:

1. Principles of Economics – N. Gregory Mankiw
2. Principles of Microeconomics – OpenStax

3. Microeconomics: Theory and Applications – Dominick Salvatore
4. Modern Microeconomics – H. L. Ahuja
5. Microeconomics – Robert S. Pindyck & Daniel L. Rubinfeld
6. Intermediate Microeconomics – Hal R. Varian
7. Economics – Paul Samuelson & William Nordhaus
8. Microeconomic Theory – Andreu Mas-Colell
9. Theory of Price – George J. Stigler
10. Managerial Economics – D. N. Dwivedi

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
(With effect from the Academic Year 2026-2027)
Semester I

General Elective (GE) / Open Elective (OE)	
3.A.a Quantitative Techniques I	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To understand the various concepts of financial mathematics such as simple interest, compound interest, and annuity
CObj 2	To enable the learner to understand the calculations related to investment option
CObj 3	To enable the learner to apply the applications of derivatives.
Course Outcomes	
COut 1	Learners can distinguish the difference between continues, nominal effective rate of interest.
COut 2	Ease in understanding and application of Derivatives
COut 3	The learner is able to calculate the earning based on dividend earned
COut 4	Learners are able to evaluate the Returns on Investments
COut 5	There is understanding of the concept of Mutual fund
COut 6	The learners are able to analyze investment options after considering the rate of return for the various types of interest calculations

Modules at a Glance

Quantitative Techniques I		
Sr. No.	Modules	No. of Lectures
1	Interest and Annuity	15
2	Shares and Mutual Funds	15
3	Derivatives and Applications of Derivatives	15
Total No. of Lectures:		45

Sr. No.	Modules
1	Interest and Annuity
	<ul style="list-style-type: none"> • Simple interest, compound interest, interest compounded more than once a year nominal, effective and continuous rates of interest. • Types of Annuities • Immediate (ordinary) annuity, its present value and future value. • Monthly Instalments (EMI) using reducing interest system, amortization of loans. • Sums based on Sinking Fund.
2	Shares and Mutual funds
	<ul style="list-style-type: none"> • Shares- Concept, face value, market value, dividend, Equity shares, preference shares, bonus shares, • Mutual Fund- Simple problems on calculation of net income after considering Entry load, exit load, dividend, change in net asset value
3	Derivatives and Applications of Derivatives
	<ul style="list-style-type: none"> • Introduction and Concept: Derivatives of constant function, logarithmic functions, polynomial and exponential function. • Rules of derivatives: addition, multiplication, quotient. • Second order derivatives. • Application of Derivatives: Maxima, Minima, Average Cost and Marginal Cost. Total revenue, Marginal revenue, Average revenue. Average and Marginal profit. Price elasticity of demand.

Quantitative Techniques I
Question Paper Pattern (Academic Year: 2026-2027)

Internal Examination & Semester End Examination – 100 Marks

A] Internals-40 Marks

Method of evaluation	Total marks
Written Test	20
Assignment	20
TOTAL	40

B] Semester End Examination (SEE)- 60 Marks

Maximum Marks 60

Duration : 2 Hours

Note: (1) All questions are compulsory, subject to internal choice.

(2) Figures to the right indicate full marks.

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1	Attempt any four of the following. A. Numerical / Case study-based question B. Numerical / Case study-based question C. Numerical / Case study-based question D. Numerical / Case study-based question E. Numerical / Case study-based question	25	20
Q-2	Attempt any four of the following. A. Numerical / Case study-based question B. Numerical / Case study-based question C. Numerical / Case study-based question D. Numerical / Case study-based question E. Numerical / Case study-based question	25	20
Q-3	Attempt any four of the following. A. Numerical / Case study-based question B. Numerical / Case study-based question C. Numerical / Case study-based question D. Numerical / Case study-based question E. Numerical / Case study-based question	25	20
	Total	75	60

Reference Books (with Chapters):

- Mathematics for Economics and Finance, Martin Anthony, Norman Biggs, Cambridge lowprice editions, 2000.
- Business Mathematics, D.C. Sancheti, V.K. Kapoor, Sultan Chand & Sons Publications, 2006.
- Business Mathematics, J.K. Singh, 2009, Himalaya Publishing House.
- Mathematics for Business and Economics, J.D. Gupta, P.K. Gupta, Man Mohan, Tata McGrawHill Publishing Company Ltd.
- Mathematics of Finance 2nd Edition Schaum's Outline Series Peter Zima, Robert Browns Tata McGraw-Hill Publishing Company Ltd.
- Business Mathematics by Dr. Amarnath Dikshit &Dr. Jinendra Kumar Jain.
- Business Mathematics by Bari - New Literature publishing company, Mumbai.
- Mathematics for Economics and Business, RS Bhardwaj, 2010, Excel Books.
- Business Mathematics, Zameerudin, Qazi, V.K. Khanna& S.K. Bhambri, Vikas Publishing House Pvt. Ltd, New Delhi

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
(With effect from the Academic Year 2026-2027)
Semester I

4.B Skill Enhancement Course (SEC)	
4.B.a Office Automation I	
Course Objectives and Course Outcomes	
Course Objectives:	
CObj 1	To familiarize students with spreadsheet concepts and the Excel working environment.
CObj 2	To develop the ability to perform basic business, financial, and data-handling tasks using Excel.
CObj 3	To enable students to use Excel tools for data organization, visualization, and simple problem solving.
Course Outcomes:	
COut 1	Learners will be able to design and manage worksheets using appropriate formatting, formulas, and functions.
COut 2	Learners will be able to apply Excel tools to solve basic business and financial problems and present data visually.
COut 3	Learners will be able to use sorting, filtering, conditional formatting, and built-in tools for effective data analysis and decision support.

Modules at a Glance

Office Automation I		
Module No.	Modules	No. of Lectures
1.	Introduction to Spreadsheets	15
2.	Data Handling, Visualization, and Problem Solving	15
Total No. of Lectures:		30

Module No.	Modules
1	Introduction to Spreadsheets
	<ul style="list-style-type: none"> • Introduction to spreadsheets and applications of Excel. • Excel interface, workbook and worksheet management. • Data types and cell referencing (relative, absolute, mixed). • Data entry, editing, formatting, and printing of worksheets. • Basic arithmetic formulas. • Business and financial calculations using Excel. • Use of basic financial and statistical functions. • Introduction to worksheet protection and use of hyperlinks.
2	Data Handling, Visualization, and Problem Solving
	<ul style="list-style-type: none"> • Sorting and Filtering of data. • Basic data cleaning techniques. • Creating and formatting charts for data visualization. • Conditional Formatting for visual analysis. • Introduction to Excel's built-in problem-solving tools. • Solving simple decision-based problems using Excel tools.

Sr. No.	List of Suggested Practicals
1	To perform basic worksheet design, formatting, and printing in MS Excel.
2	To solve business and financial problems using Excel formulas and functions.
3	To calculate values related to interest, depreciation, and salaries using Excel.
4	To create and interpret different types of charts for given data sets.
5	To apply Sorting, Filtering, and basic Data Cleaning techniques.
6	To use Conditional Formatting for data analysis and interpretation.
7	To solve simple decision-based problems using Excel's built-in solving tools.

Skill Enhancement Course

Question Paper Pattern (Academic Year: 2026-2027)

Office Automation I

Semester End Practical Examination - 50 Marks

A] Semester End Practical Examination: 50 Marks

Duration - 2 Hours

Sr. No.	Component	Marks
01	Practical Question 1	15
02	Practical Question 2	15
03	Journal	10
04	Viva and Attendance	10
Total		50

Reference Books:

1. Curtis Frye, *Microsoft Excel Step by Step*, Microsoft Press.
2. John Walkenbach, *Excel Bible*, Wiley India.
3. E. Joseph Billo, *Excel for Business and Economics*, Wiley.

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
(With effect from the Academic Year 2026-2027)
Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System
Semester I

5. Ability & Value Enhancement Courses/Value Enhancement Course	
5.A.a Language and Literature - I	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To understand the effective use of power point presentation, relevance and importance of interpersonal communication skills
CObj 2	To enhance written communication skills
CObj 3	To enable the learners to adapt to the requirements of the industry.
Course Outcomes	
COut 1	The learners learn to use statistical tools in PowerPoint presentations, write letters of enquiry and letters of complaint.
COut 2	Practical application of preparing flyers and leaflets help the learners demonstrate their creativity.
COut 3	Nonverbal communication skills of learners are enhanced.
COut 4	The learner is able to analyze the components of letter writing.
COut 5	Learners can understand the theories of communication
COut 6	Learners can differentiate between the different modes of communication
COut 7	Learners is trained to apply ethics at work place
COut 8	Learners is able to create a resume and face job interviews with ease
COut 9	Learners can relate to the barriers of communication and are able to cope with the same
COut 10	Learners can apply the most appropriate and effective mode of communication

Modules at a Glance

Language and Literature - I		
Sr. No.	Modules	No. of Lectures
1	Theory of Communication & Obstacles to Communication in Business World	15
2	Business Correspondence	15
3	Language and Writing Skills	15
Total		45

Sr. No.	Modules
1	Theory of Communication & Obstacles to Communication in Business World
	<ul style="list-style-type: none"> ● Concept of Communication: Meaning, Definition, Process, Need, Feedback ● Objectives of Communication: Channels- Formal and Informal- Vertical, Horizontal, Diagonal, Grapevine Objectives of Communication: Information, Advice, Order and Instruction, Persuasion, Motivation, Education, Warning, and Boosting the Morale of Employees (A brief introduction to these objectives to be given) ● Methods and Modes of Communication: Methods: Verbal and Nonverbal, Characteristics of Verbal Communication, Characteristics of Non-verbal Communication, Computers and E- communication. ● Problems in Communication /Barriers to Communication: Physical/ Semantic/Language / Socio-Cultural / Psychological/ Barriers, Ways to Overcome these Barriers ● Business Etiquette, Corporate grooming and behavior ● Listening: Types, Process and Importance of Listening Skills, Cultivating good Listening Skills. Ethics in communication
2	Business Correspondence
	<ul style="list-style-type: none"> ● Theory of Business Letter Writing: Parts, Structure, Layouts—Full Block, Principles of Effective Letter Writing ● Principles of effective Email Writing ● Personal Correspondence: Statement of Purpose, Job Application Letter, Resume, LinkedIn profile, Letter of Acceptance of Job Offer, Letter of Resignation, Letter of Recommendation
3	Language and Writing Skills

	<ul style="list-style-type: none"> ● Business Communication Paragraph Writing: Developing an idea, using appropriate linking devices, etc ● Cohesion and Coherence, etc [Interpretation of technical data, Composition on a given situation, a short informal report & improvisation Activities] Listening, Comprehension, Speaking Skills: Presenting a News Item, Dialogue and Speeches ● Paragraph Writing: Preparation of the first draft, Revision and Self Editing, Rules of spelling. Reading Comprehension: Analysis of texts from the fields of Commerce and Management
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**Ability & Value Enhancement Courses/Value
Enhancement Course**

Question Paper Pattern (Academic Year: 2026-2027)

Language and Literature I

A] Internal Evaluation - 40 Marks

Method of Evaluation	Marks
Reviewing any book/article/ film of Non-English Origin	20
Assignment/Activity/Reading of management Data/Picture Talk	20
Total	40

B| External Evaluation - 60 Marks

Maximum Marks: 60

Duration: 2 Hours

Note: 1. All questions are compulsory.
2. All questions carry equal marks.

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question E. Theory / Case study/ Concept-based question	25	20
Q-2	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question E. Theory / Case study/ Concept-based question	25	20
Q-3	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question	25	20

	E. Theory / Case study/ Concept-based question		
	Total	75	60

Books and References:

- Agarwal, AnjuD(1989) A Practical Handbook for Consumers, IBH.
- Alien, R.K.(1970) Organisational Management through Communication. Podar : Nurturing Intellect Creating Personalities
- Ashley,A(1992) A Handbook Of Commercial Correspondence, Oxford University Press.
- Aswathapa, K (1991)Organisational Behaviour, Himalayan Publication, Mumbai.
- Atreya N and Guha (1994) Effective Credit Management, MMC School of Management, Mumbai.
- Bahl,J.C. and Nagamia,S.M. (1974) Modern Business Correspondence and Minute Writing.
- Balan,K.R. and Rayudu C.S. (1996) Effective Communication, Beacon New Delhi.
- Bangh, Lsue, Fryar,Maridell and Thomas David A. (1998) How to Write First Class Business Correspondence, N.T.C. Publishing Group USA
- Banerjee, Bani P (2005) Foundation of Ethics in Mangement Excel Books
- Businessworld Special Collector's Issue: Ethics and the Manager
- Barkar, Alan(1993) Making Meetings Work, Sterling Publications Pvt. Ltd., New Delhi.
- Basu,C.R.(1998) Business Organisation and Management, T.M.H.New Delhi.
- Benjamin, James (1993) Business and Professional Communication Concepts and Practices, Harper Collins College Publishers, New York.
- Bhargava and Bhargava(1971) Company Notices, Meetings and Regulations
- Black, Sam (1972) Practical Public Relations, E.L.B.S. London.
- BoveeCourtland, L and Thrill, John V(1989) Business Communication, Today McGraw Hill, New York, Taxman Publication.
- Burton, G and Thakur, (1995) Management Today- Principles and Practices. T.M.H.,New Delhi.
- Darrow, Richard, Forrstal, Dan and Coolman, Aubrey (1967) Public Relations Handbook, TheDartwellCo., Chicago.
- Dayal, Ishwar(1981) Managing Large Organizations: A Comparative Study.
- Drucher,P.F.(1970) Technology, Management and Society, Pan Books London.
- Drucher,P.F.(1974)Management Responsibilities Practices, Heinemann, London.
- Eyre, E.C. (1985), Effective Communication Made Simple, Rupa and Co.Calcutta
- Ecouse Barry, (1999), Competitive Communication: A Rhetoric for Modern Business, OUP.
- Ecouse Barry, (1999), Competitive Communication: A Rhetoric for Modern Business, OUP.

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System
Value Enhancement Course
(With effect from the Academic Year 2026-2027)
Semester I

5. Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System	
5.B.a Corporate Finance	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To learn about the various concept of financial management
CObj 2	To study time value of money and its impact in depth
CObj 3	To help in bring role of finance in maintaining the business.
CObj 4	Develop a comprehensive understanding of financial decision-making within a corporate context.
CObj 5	Understand the concept of the cost of capital and its significance in capital budgeting and financing decisions.
CObj 6	Develop skills in financial modelling for forecasting and analyzing financial performance.
CObj 7	Learn about the financial aspects of mergers, acquisitions, and corporate restructuring.
Course Outcomes	
COut 1	This subject gives an opportunity to students to develop their understanding towards

	corporate finance that is useful for financial business.
COut 2	It ensures focus on sensitizing and understanding the importance of financial management
COut 3	It ensures awareness about various Innovative Business Models in relation to corporate finance which can be used by them as future entrepreneurs.
COut 4	Equips individuals to make informed financial choices that align with the goals and objectives of the organization.
COut 5	Provides insights into determining the optimal mix of debt and equity to minimize the cost of capital.
COut 6	Enhances quantitative skills for making accurate financial projections and strategic decisions.
COut 7	Equips individuals to navigate complex financial transactions and contribute to successful corporate strategies.

Modules at glance

Sr. No.	Modules	No. of Lectures
1	Introduction to Corporate Finance	15
2	Capital Structure and Leverage	15
3	Time Value of Money	15

Sr. No.	Approved Syllabus
1	Introduction to Corporate Finance
	<p>Introduction to Corporate Finance:</p> <ul style="list-style-type: none"> • Meaning, Principles of Corporate Finance, Significance of Corporate Finance, • Amount of Capitalisation, Over Capitalisation and Under Capitalisation, Fixed capital and Working Capital funds. <p>Introduction to ownership securities–</p> <ul style="list-style-type: none"> • Ordinary Shares, Preference Shares, Creditorship Securities, Debtors and Bonds, Convertible Debentures, Concept of Private Placement of Securities. <p>Mobilisation of Funds:</p> <ul style="list-style-type: none"> • Public deposits, Company deposits, Protection of Depositors (Deposit Insurance and Credit Guarantee Corporation (DICGC)), Public deposits with NBFC's., • Foreign Direct Investments, Global Depository Receipts, American Depository Receipts, Policy development

2	Capital Structure and Leverage
	<ul style="list-style-type: none"> • Introduction to Capital Structure theories, EBIT – EPS analysis for Capital Structure decision. • Cost of Capital – Cost of Debt, Cost of Preference Shares, Cost of Equity Shares and Cost of Retained Earnings, Calculation of Weighted Cost of Capital. • Introduction to concept of Leverage - Operating Leverage, Financial Leverage and Combined Leverage. • Weighted Average Cost of Capital
3	Time Value of Money
	<ul style="list-style-type: none"> • Introduction to Time Value of Money – compounding and discounting, Factors affecting Time value of Money • Introduction to basics of Capital Budgeting (time value of money-based methods) NPV and IRR (Net Present Value and Internal Rate of Return) • Importance of Risk and Return analysis in Corporate Finance

Teaching Pedagogy:

Use of technology, Chalk and Talk method, Group discussions, case study analysis, Flip class, Quiz, management games would be conducted in the class to make learning an enjoyable experience.

Minor

Question Paper Pattern (Academic Year: 2026-2027)

Corporate Finance

A] Internal Examination & Semester End Examination – 100 Marks

A] Internals-40 Marks

Method of evaluation	Marks
Assignment	20
Power Point Presentation-Pre-set criteria*	20
TOTAL	40

B] Semester End Examination (SEE)- 60 Marks

Maximum Marks 60

Duration

: 2 Hours

Note:

- (1) All questions are compulsory, subject to internal choice.
 (2) Draw diagrams wherever necessary.
 (3) Figures to the right indicate full marks.

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1	Attempt any four of the following. A. Theory / Case study/ concept-based question B. Theory / Case study/ concept-based question C. Theory / Case study/ concept-based question D. Theory / Case study/ concept-based question E. Theory / Case study/ concept-based question	25	20
Q-2	Attempt any four of the following. A. Theory / Case study/ concept-based question B. Theory / Case study/ concept-based question C. Theory / Case study/ concept-based question D. Theory / Case study/ concept-based question E. Theory / Case study/ concept-based question	25	20
Q-3	Attempt any four of the following. A. Theory / Case study/ concept-based question B. Theory / Case study/ concept-based question C. Theory / Case study/ concept-based question D. Theory / Case study/ concept-based question E. Theory / Case study/ concept-based question	25	20
	Total	75	60

Reference Books:

1. Foster, George Financial Statement Analysis, 2nd ed., Pearson Education Pvt Ltd
2. Damodaran, A. (2008). Damodaran on Valuation, Security Analysis for Investment and Corporate Finance (2nd ed.). Wiley India Pvt. Ltd.
3. Chandra, P. (2011). Corporate Valuation and Value Creation, (1st ed). TMH
4. Weston, Chung, Hoag, Mergers, Restructuring and Corporate Control, Prentice Hall Of India. 5. M.Y. Khan and P.K. Jain - Financial Management - Tata - McGraw Hill Publishing co. Ltd., New Delhi.
5. Prasanna Chandra - Financial Management - Tata

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
(With effect from the Academic Year 2026-2027)
Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System
Value Enhancement Course
Semester I

5. Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System	
5.C.a Indian traditional approach in conservation and sustainability	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	The course will enable the learner to understand the scientific and moral value of traditional ancient Indian knowledge.
CObj 2	The course is expected to convert the ancient wisdom to the applied aspects of the modern scientific paradigm.
CObj 3	The course is expected to create interest and excitement in the learner to explore more on the specific area of knowledge.
CObj 4	The course is expected to empower the learner to inspire others in learning our own traditional practices of sustainability.
CObj 5	The course is expected to develop the interest in the learner to do further research in the specific area of knowledge.
Course Outcomes	
COut 1	The learners shall be able to acknowledge the contribution of traditional Indian wisdom in various commercial fields.
COut 2	The learner should be able to draw connections between the trade & commercial activities along with their influence on the environment and the efforts to address the same.

COout 3	The learners shall be able to identify traditional eco-friendly options for current modes of transportation.
COout 4	The learner should be able to understand the ancient practices of resource conservation and to have a holistic approach towards sustainable development in modern times.
COout 5	The learners should be able to analyze the current practices of land management with respect to ancient Indian practices for the conservation of the same.
COout 6	The syllabus shall enable the learners to correlate the conventional practices of water conservation with special reference to ancient wisdom in the same regards.
COout 7	The learners shall be able to suggest measures for forest conservation through various ancient Indian solutions.
COout 8	The learners should be able to evaluate the Indian contribution in various contemporary fields of social sciences and technologies.
COout 9	The learners should be able to describe the case studies to illustrate the significant contribution of Indian scholars in various conventional fields of social sciences.
COout 10	The learners should be able to examine the future perspectives and possibilities of various aspects of the Indian Knowledge System to enrich the society

Modules at a Glance

Indian Traditional Approach in Conservation and Sustainability		
Sr. No.	Modules	No. of Lectures
1	Conventional Trade and Commerce and Environment	15
2	Resource Conservation and Sustainability	15
3	Significant Indian Contributions to the World	Internal Component/ Assessment
Total No. of Lectures:		30

Sr. No.	Modules
1	Conventional Trade and Commerce and Environment
	<p>A. Introduction and overview of Indian Knowledge System. Indian disciplinary knowledge system in different fields like, architecture, science & technology, nature, astronomy, agriculture, health & medicine, Defence (case study of Rani Abbakka Chowta who defeated Portuguese)</p> <p>B. Traditional commercial activities & trade practices with reference to environmental conservation: Agricultural trade, Silk, Cotton, Spices, Metallurgy, Textile industry, etc.</p> <p>C. Transportation and its modes: Grand Trunk road, Boat & ship-building, Energy efficiency in the transport sector: a current scenario, ecomobility. Impact of transport on climate, impact of climate on transport.</p>
2	Resource Conservation and Sustainability
	<p>A. Land Management & Conservation: Ancient & traditional agricultural activities, Conservation strategies, Harappan civilization-town planning, etc.</p> <p>B. Water Management & Conservation: Harappan civilization, ancient practices of irrigation, Tanks, Lakes, Stepwells, Traditional rain-water harvesting, Community involvement.</p> <p>C. Forest & Wildlife Conservation: Sacred forests, sacred groves, sacred hills, Social forestry, Agroforestry, Animal worshiping, Worshiping natural forces. Women and conservation- Ecofeminism.</p>

3	Significant indian contributions to the world (internal component/assessment)
	<p>A. Contribution in the field of agriculture: Food crops, Cotton, Animal husbandry, etc.</p> <p>B. Contribution in the field of science & technology: Invention of zero, etc.</p> <p>C. Contributions in the field of health & medicine: Ayurveda, Meditation, Yoga, etc.</p> <p>D. Case studies on Indian Knowledge System on any particular/ specific area of knowledge: Ayurveda, Agriculture, Astronomy, Architecture, Economics, Mathematics, Philosophy, Yoga, Medicine, Nature, Politics, Weaponry, Military science, Literature, Poetics or any other area of knowledge. Indian Knowledge System- Future perspectives: Challenges and Opportunities.</p>

Indian traditional approach in conservation and sustainability

Internal Examination & Semester End Examination – 50 Marks

A] Internals-20 Marks

Allocation of 20 Marks---Internal evaluation

Method of evaluation	Total marks
MODULE-III is given for internal assessment. Students will be writing assignments on the selected topics	20
Total	20

B] Semester End Examination (SEE)- 30 Marks

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1	Attempt Any One		
	A. Concept/ Theory -Essay type question	10	
	B. Concept/ Theory -Essay type question	10	10
Q-2	Attempt Any One		
	A. Concept/ Theory -Essay type question	10	
	B. Concept/ Theory -Essay type question	10	10
Q-3	Write Short Notes on Any Two		
	A. Short Note	5	
	B. Short Note	5	10
	C. Short Note	5	
	D. Short Note	5	
	TOTAL		30

SEMESTER II

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
Major
(With effect from the Academic Year 2026-2027)
Semester II

1.Major: Applied Financial Analysis	
1.A.a Applied Financial Analysis	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	Develop an advanced understanding of financial statements and their components.
CObj 2	Enable students to interpret financial statements using vertical, horizontal, and comparative analysis.
CObj 3	Build competency in applying ratio analysis for evaluating financial performance and position.
CObj 4	Introduce integrated performance evaluation tools such as the DuPont Model.
CObj 5	Equip students with practical skills in using spreadsheet tools (e.g., Microsoft Excel) for financial analysis and visualization.
CObj 6	Enhance analytical abilities through inter-firm and intra-firm comparisons and benchmarking practices.
CObj 7	Provide exposure to real-world financial data for corporate evaluation.
CObj 8	Develop decision-making skills using cash flow and fund flow analysis.
CObj 9	Familiarize students with credit analysis and investment decision-making techniques.
CObj 10	Strengthen the ability to interpret annual reports, including notes to accounts.
Course outcomes	
COut 1	Analyze financial statements, including income statement, balance sheet, and cash flow statement.
COut 2	Interpret financial data using vertical, horizontal, and trend analysis techniques.
COut 3	Compare financial performance across firms and within firms over time.

COut 4	Evaluate financial health using comprehensive ratio analysis (liquidity, profitability, solvency, efficiency, and market ratios).
COut 5	Apply the DuPont Analysis for integrated performance evaluation.
COut 6	Use Microsoft Excel for ratio computation, financial modeling, and data visualization.
COut 7	Assess corporate financial performance using real-world data and case studies.
COut 8	Interpret cash flow and fund flow statements for strategic decision-making.
COut 9	Examine annual reports, including notes to accounts, for deeper financial insights.

Modules at a Glance

Applied Financial Analysis		
Sr. No.	Modules	No. of Lectures
1	Advanced Interpretation of Financial Statements	15
2	Ratio and Performance Analysis	15
3	Applied Corporate Analysis	15
Total No. of Lectures		45

Sr. No	Modules
1.	Advanced Interpretation of Financial Statements
	<ul style="list-style-type: none"> • Review of Financial Statements: Income Statement, Balance Sheet, and Cash Flow Statement • Vertical and Horizontal Analysis – Interpretation of Trends • Inter-firm and Intra-firm Comparison of Financial Statements • Understanding Notes to Accounts and Annual Report Components
2.	Ratio and Performance Analysis
	<ul style="list-style-type: none"> • Comprehensive Ratio Analysis: Liquidity, Efficiency, Solvency, Profitability, and Market Ratios • DuPont Model – Integrated Performance Evaluation • Use of Excel Tools for Ratio Computation and Visualization • Sectoral Comparison and Benchmarking Practices
3.	Applied Corporate Analysis
	<ul style="list-style-type: none"> • Cash Flow and Fund Flow Analysis for Decision-making • Common-size and Trend Analysis for Strategic Planning • Case Studies: Evaluating Financial Health of Listed Companies • Introduction to Credit and Investment Analysis using Real-world Data

Major Course I***Question Paper Pattern (Academic Year: 2026-2027)*****Applied Financial Analysis****Internal Examination & Semester End Examination – 100 Marks****A] Internals-40 Marks**

Method of evaluation	Marks
Written Test	15
Written Test	15
Assignment	10
TOTAL	40

B] Semester End Examination (SEE)- 60 Marks

Maximum Marks 60

Duration : 2

Hours Note:

- (1) All questions are compulsory, subject to internal choice.
- (2) Draw diagrams wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Attempt any four from Q1, Q2, Q3, Q4, Q5

Question No.	Particulars (Nature of Questions)	Marks
Q-1	Practical Question	15
Q-2	Practical Question	15
Q-3	Practical Question	15
Q-4	Practical Question	15
Q-5	Short notes	15
	Total	75

Reference Books:

Sr. No.	Title of the Book	Author(s)	Year of Publication	Area Covered
1	Financial Statement Analysis and Security Valuation	Stephen H. Penman	2013	Advanced financial statement analysis
2	Business Analysis and Valuation Using Financial Statements	Krishna G. Palepu & Paul M. Healy	2015	Financial analysis & valuation
3	Financial Statement Analysis	K. R. Subramanyam	2014	Interpretation & analysis
4	Financial Analysis and Decision Making	David E. Vance	2003	Decision-making using financial data
5	Financial Management	I. M. Pandey	Latest Edition	Ratios & financial performance
6	Analysis and Use of Financial Statements	Gerald I. White, Ashwinpaul C. Sondhi & Dov Fried	2003	Practical financial analysis
7	Ratio Analysis Fundamentals	Axel Tracy	2012	Ratio analysis
8	Investment Valuation	Aswath Damodaran	2012	Valuation & investment decisions
9	Equity Asset Valuation	Jerald E. Pinto et al.	2020	Equity and investment analysis
10	Corporate Finance	Jonathan Berk & Peter DeMarzo	2020	Corporate financial decisions
11	Financial Modeling in Excel	Alastair Day	2015	Excel-based financial modeling
12	Microsoft Excel Data Analysis and Business Modeling	Wayne L. Winston	2019	Data analysis using Excel

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
(With effect from the Academic Year 2026-2027)
Semester II

1. Major	
1.A.b Artificial Intelligence	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To introduce and appreciate use of AI and the theory underlying for solving problems.
CObj 2	To learn about representing difficult real life problems as state space representation and solving them using AI techniques.
CObj 3	To understand the basic issues of knowledge representation and develop skills for reasoning and handling uncertainty.
CObj 4	To introduce advanced topics of AI for solving complex problems
Course Outcomes	
COut 1	Learners understand the building blocks of AI.
COut 2	Learner is analyzing a problem and solving it by implementing suitable techniques.
COut 3	Learner is applying logic based techniques to solve examples.
COut 4	Learners are able to implement Bayesian approaches
COut 5	Learners are able to explore various applications of AI.
COut 8	Learners is able to create a resume and face job interviews with ease.

Modules at a Glance

Artificial Intelligence		
Sr. No.	Modules	No. of Lectures
1	Intelligent agents and Search Algorithms	15
2	Problem solving and Knowledge reasoning	15
3	Uncertainty and Applications of AI	15
Total		45

Sr. No.	Modules
1	Intelligent agents and Search Algorithms
	Introduction to AI & Intelligent Agents: AI Problems and AI techniques, Solving problems by searching, Problem Formulation. State Space Representation, Structure of Intelligent agents, Types of Agents Uninformed Search: DFS, BFS, Uniform cost search, Depth Limited Search, Iterative Deepening. Informed Search: Heuristic functions, Hill Climbing, Simulated Annealing, Best First Search, A* algorithm
2	Problem solving and Knowledge reasoning
	Constraint Satisfaction Programming: Cryptarithmic, Map Coloring, NQueens. Adversarial Search: Game Playing, Min-Max Search, Alpha Beta Pruning Knowledge and Reasoning: Knowledge Based Agent, Overview of Propositional Logic, First Order Predicate Logic, Inference in First Order Predicate Logic: Forward and Backward Chaining, Resolution.
3	Uncertainty and Applications of AI
	Uncertainty: Representing Knowledge in an Uncertain Domain, Bayesian Network, Conditional Probability, Joint Probability, Bayes' theorem, Belief Networks, Simple Inference in Belief Networks, Sequential decision problems AI Applications & Case Studies: AI in Healthcare, Finance, Autonomous Vehicles, and Cybersecurity, AI-powered Recommendation Systems, Case Studies: Google DeepMind, OpenAI's GPT, IBM Watson, Hybrid AI Techniques (Neuro-Symbolic AI), Combining Symbolic AI with Deep Learning, Hybrid AI models for complex

problem solving

Lists of Practical's to be conducted
Implement Depth First Search
Implement Breadth First Search
Implement A* Search
Implement AO* Search
Simulate tic – tac – toe game using Min-Max Search
Implement Alpha Beta Pruning
Simulate solution for 4-Queen / N-Queen problem
Simulate solution for Map Coloring
Simulate solution for Missionaries and Cannibals
Implement two class decision tree for suitable problems
Implement multi class decision tree for suitable problems
Design knowledge base using propositional logic

**Ability & Value Enhancement Courses/Value
Enhancement Course**
Question Paper Pattern (Academic Year: 2026-2027)
Artificial Intelligence

A) Internal Evaluation - 40 Marks

A Certified copy journal is essential to appear for the practical examination

Method of Evaluation	Marks
Practical Work	20
Journal	10
Viva Voce	10
Total	40

B) External Evaluation - 60 Marks

Maximum Marks: 60

Duration: 2 Hours

Note: 1. All questions are compulsory.
2. All questions carry equal marks.

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question E. Theory / Case study/ Concept-based question	25	20

Q-2	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question Theory / Case study/ Concept-based question	25	20
Q-3	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question E. Theory / Case study/ Concept-based question	25	20
	Total	75	60

Books and References:

- Russell, Stuart J., and Peter Norvig. Artificial Intelligence: A Modern Approach. 4th ed., Pearson, 2020.
- Poole, David L., and Alan K. Mackworth. Artificial Intelligence: Foundations of Computational Agents. 2nd ed., Cambridge University Press, 2017.
- Knight, Kevin, and Elaine Rich. Artificial Intelligence. 3rd ed., McGraw Hill, 2017.
- Hastie, Trevor, Robert Tibshirani, and Jerome Friedman. The Elements of Statistical Learning. Springer, 2013.
- Khemani, Deepak. A First Course in Artificial Intelligence. 1st ed., TMH, 2017.

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
(With effect from the Academic Year 2026-2027)
Minor
Semester II

2. Minor	
2.A.a. Macro Economics I	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To introduce students to the scope, importance, and basic concepts of macroeconomics.
CObj 2	To develop understanding of national income accounting, including GDP, GNP, and related aggregates.
CObj 3	To explain the circular flow of income in closed and open economies.
CObj 4	To analyze the nature and phases of trade/business cycles.
CObj 5	To provide in-depth knowledge of Keynesian theory, especially effective demand.
CObj 6	To examine consumption and investment functions, including APC, MPC, and MEC.
CObj 7	To understand the concept and working of the investment multiplier.
Course outcomes	

COut 1	Explain key macroeconomic concepts and their relevance in economic analysis.
COut 2	Compute and interpret national income aggregates such as GDP, GNP, NNP, and disposable income.
COut 3	Differentiate between real and nominal GDP and apply GDP deflator in numerical problems.
COut 4	Illustrate circular flow of income in closed and open economies.
COut 5	Identify and analyze phases of trade cycles and their economic implications.
COut 6	Evaluate investment decisions using Marginal Efficiency of Capital (MEC).

Modules at a Glance

Macro Economics I		
	Modules	No. of Lectures
1	Overview of Macro Economics	15
2	Basic Concepts of Keynesian Economics	15
3	Money Supply, Demand and IS-LM Model	15
Total No. of Lectures:		45

	Modules
	Overview of Macro Economics
	<p>A. Scope and Importance of Macroeconomics,</p> <p>B. National Income: Treating GDP both as Income and Expenditure, Gross Domestic Product (GDP), Gross National Product (GNP), The Difference Between GDP and GNP, Net National Product, Personal Income, Personal Disposable Income, Components of GDP: Consumption, Investment, Government Purchases, Net Exports; Real and Nominal GDP: GDP Deflator, Numerical Illustrations</p> <p>C. Circular flow of aggregate income and expenditure and its importance-closed and open economy models.</p> <p>D. Trade Cycles: Definition, Features and Phases</p>
	Basic Concepts of Keynesian Economics

	<p>A. Keynesian Economics- Theory of Effective Demand</p> <p>B. Consumption Function- Psychological Law of Consumption APC and MPC, Factors Influencing Consumption – Objective Factor , Subjective Factor- Implication of Consumption Function -(Numerical Illustrations)</p> <p>C. Investment function- Marginal Efficiency of Capital, Factors influencing MEC (Numerical Illustrations)</p> <p>D. Investment Multiplier- Working, Assumptions, Limitations</p>
	Money Supply, Demand and IS-LM Model
	<p>A. Money Supply- Meaning , Determinants, Velocity of Circulation of Money and it's determinant.</p> <p>B. Demand for Money- Classical Approach, Keynesian Approach-Transaction, precautionary and speculative demand and liquidity trap, Liquidity preference theory of interest.</p> <p>C. The IS-LM model of integration of commodity and money markets- Derivation of IS curve and LM curve, General Equilibrium & Determination of Equilibrium Interest rate and National Income.</p> <p>D. Shift in IS and LM curve- Effectiveness of Monetary and Fiscal Policies- 'Crowding Out' Effect</p>

Minor Course

Question Paper Pattern (Academic Year: 2026-2027)

Financial Economics I

Internal Examination & Semester End Examination – 100 Marks

A] Internals-40 Marks

Method of evaluation	Marks
Assignment – Annual Report of Reserve Bank of India and other financial entities	20
Case study analysis/ Project	20
TOTAL	40

B| Semester End Examination (SEE)- 60 Marks

Maximum Marks: 60

Duration : 2 Hours

Note:

- All questions are compulsory, subject to internal choice.
- Draw diagrams wherever necessary.
- Figures to the right indicate full marks.

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1	Attempt any four of the following. A. Theory / Case study/ Concept-based question B.Theory / Case study/ Concept-based question C.Theory / Case study/ Concept-based question D.Theory / Case study/ Concept-based question E.Theory / Case study/ Concept-based question	25	20
Q-2	Attempt any four of the following. A.Theory / Case study/ Concept-based question B.Theory / Case study/ Concept-based question C.Theory / Case study/ Concept-based question D.Theory / Case study/ Concept-based question E.Theory / Case study/ Concept-based question	25	20
Q-3	Attempt any four of the following. A.Theory / Case study/ Concept-based question B.Theory / Case study/ Concept-based question C.Theory / Case study/ Concept-based question D.Theory / Case study/ Concept-based question E.Theory / Case study/ Concept-based question	25	20
	Total	75	60

REFERENCE BOOKS:

1. Macro Economics – Dr. D.M. Mithani
2. A Textbook of Macro Economics – Dr. D.M. Mithani
3. Principles of Macro Economics – S.K. Misra & V.K. Puri
4. Macroeconomics – Mankiw N. Gregory

5. Macroeconomic Theory – M.L. Jhingan
6. Macro Economics – K.N. Verma
7. Macroeconomics: Theory and Policy – Kirti Srivastava
8. An Introduction to Macroeconomics – A. Marimuthu & D. Bose

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
General Elective (GE) / Open Elective (OE)
(With effect from the Academic Year 2026-2027)
Semester II

3. General Elective (GE) / Open Elective (OE)	
3.A.a Quantitative Techniques II	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To understand the basics of statistics and learn the various modes of presentation of data.
CObj 2	To acquire knowledge of probability and standard statistical distribution
CObj 3	To understand the concept of decision theory by using various methods
Course Outcomes	
COut 1	The learners are able to distinguish between different types of model for time series analysis and there is understanding of data interpretation.
COut 2	The learner is able to interpret data using methods for summarizing data assets, including common graphical tools such as box plots, histograms, frequency polygon and ogive curves
COut 3	Different types of decision theory and the practical application of the same is well understood.
COut 4	Learners are able to apply the concept and take decisions under uncertainty
COut 5	Learners are able to analyze the relationship between Coefficient of Correlation and Regression coefficients
COut 6	Learner is able to apply simple and multiple linear regression models and demonstrate model parameters.

Modules at a Glance

Applied Statistics		
Sr. No.	Modules	No. of Lectures
1	Correlation and Regression	15
2	Time Series	15
3	Decision Theory	15
Total No. of Lectures:		45

Sr. No.	Modules
1	Correlation and Regression
	<ul style="list-style-type: none"> ● Correlation Analysis: Meaning, Types of Correlation, Scatter diagram, Karl Pearson's method of Correlation Coefficient ● Regression Analysis: Meaning, Concept of Regression equations, Slope of the Regression ● Regression Coefficients, Relationship between Coefficient of Correlation and Regression coefficients, Coefficient of Determination ● Finding the equations of regression lines by method of least squares.
2	Time Series
	<ul style="list-style-type: none"> ● Time series: Concepts and components of a time series. Representation of trend by Freehand Curve Method, Estimation of Trend using Moving Average Method and Least Squares Method (Linear Trend only). Additive and Multiplicative Model ● Estimation of Seasonal Component using Simple Arithmetic Mean for Additive Model (For Trend free data only). ● Concept of Forecasting.
3	Decision Theory
	<ul style="list-style-type: none"> ● Concept of Decision theory: - Decision maker, Courses of Action, States of Nature, Pay-off matrix; ● Decision making under uncertainty: - Maximin, Maximax, Minimax regret and Laplace criteria; simple examples to find optimum decision. Formulation of Payoff Matrix. ● Decision making under Risk: - Expected Monetary Value (EMV); Decision Tree; Simple Examples based on EMV. Expected Opportunity Loss (EOL), simple examples based on EOL

Quantitative Techniques II**Question Paper Pattern (Academic Year: 2026-2027)****Internal Examination & Semester End Examination – 100 Marks****A] Internals-40 Marks**

Method of evaluation	Total marks
Written Test	20
Project/ Assignment / Work sheets/ Written Test	20
TOTAL	40

B] Semester End Examination (SEE)- 60 Marks

Maximum Marks 60

Duration : 2Hour

Note: (1) All questions are compulsory, subject to internal choice.

(2) Draw diagrams wherever necessary.

(3) Figures to the right indicate full marks.

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1	Attempt any four of the following. A. Numerical / Case study-based question B. Numerical / Case study-based question C. Numerical / Case study-based question D. Numerical / Case study-based question E. Numerical / Case study-based question	25	20
Q-2	Attempt any four of the following. A. Numerical / Case study-based question B. Numerical / Case study-based question C. Numerical / Case study-based question D. Numerical / Case study-based question E. Numerical / Case study-based question	25	20
Q-3	Attempt any four of the following. A. Numerical / Case study-based question B. Numerical / Case study-based question C. Numerical / Case study-based question D. Numerical / Case study-based question E. Numerical / Case study-based question	25	20
	Total	75	60

Reference Books (with Chapters):

- Statistics by Schaum Series.
- Operations Research by Gupta and Kapoor.
- Operations Research by Schaum Series.
- Fundamentals of Statistics - D. N. Elhance.
- Statistical Methods - S.G. Gupta (S. Chand & Co.
- Statistics for Management - Lovin R. Rubin D.S. (Prentice Hall of India).
- Statistics - Theory, Method & Applications D.S. Sancheti& V. K. Kapoor.
- Modern Business Statistics - (Revised)-B. Pearles & C. Sullivan –Prentice Hall of India.
- Business Mathematics & Statistics: B Aggarwal, Ani Book Pvt. Limited.
- Business Mathematics: D C Sancheti& V K Kapoor, Sultan Chand & Sons.
- Mathematics for Economics and Finance, Martin Anthony, Norman Biggs, Cambridge lowprice editions, 2000.

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
(With effect from the Academic Year 2026-2027)
Vocational & Skill Enhancement Courses

Semester II

4. Vocational & Skill Enhancement Courses	
4. A. a Intellectual Property Rights	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To recognize the importance of IP and to educate the pupils on basic concepts of Intellectual Property Rights.
CObj 2	To make the learners understand the statutory provisions of different types of IPRs in simple forms.
CObj 3	To learn the procedure of obtaining Patent, Copyright, Geographical Indication, Trademark, Industrial Design and Trade Secret.
Course Outcomes	
COut 1	Distinguish and explain various forms of IPRs.
COut 2	Identify criteria to fit one's own intellectual work in particular form of IPRs.
COut 3	Apply statutory provisions to protect particular forms of IPRs.
COut 4	Be familiar with intellectual property protection mechanisms.
COut 5	Explain why something is or is not entitled to intellectual property protection.
COut 6	Discover the new developments in IPR.
COut 7	Learners shall be able to look for IPR protection primarily before the conventional mode of protection like scientific publication.

Modules at a Glance

Intellectual Property Rights		
Sr. No.	Modules	No. of Lectures
1	Introduction to Intellectual Property Rights	10
2	Types of Intellectual Property Rights	10
3	Application and Emerging Trends	10
Total		30

Sr. No.	Modules
1	Introduction to Intellectual Property Rights
	Meaning of Intellectual Property and Property Rights: Basic concepts of Intellectual Property; Nature, Scope and Significance of Intellectual Property
2	Types of Intellectual Property Rights
	Patent, Copyright, Geographical Indication, Trademark, Industrial Design and Trade Secret
3	Application and Emerging Trends
	Technology and Legal developments in Intellectual Property; Advantages and Disadvantages of IPR; Recent changes in IPR laws; Registration procedure

Question Paper Pattern (Academic Year: 2026-2027)**Intellectual Property Rights****Semester End Examination and Internal Evaluation – 50 Marks****Semester II****A] Internal Evaluation - 20 Marks**

Method of Evaluation	Marks
Case Study Analysis/ Assignments	20
Total	20

B] Semester End Examination (SEE)- 30 Marks**Maximum Marks: 30****Duration: 1 Hour****Note: 1. All questions are compulsory.****2. All questions carry equal marks.**

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To be Attempted)
Q1.	Answer the following questions (Any 2) A. Practical/ Case study Based question B. Practical/ Case study Based question C. Practical/ Case study Based question	5 5 5	10
Q2.	Answer the following questions (Any 2) A. Practical/ Case study Based question B. Practical/ Case study Based question C. Practical/ Case study Based question	5 5 5	10
Q3.	Answer the following questions (Any 2) A. Practical/ Case study Based question B. Practical/ Case study Based question C. Practical/ Case study Based question	5 5 5	10
	Total	45	20

Books and References:

- “Law Relating to Intellectual Property Rights” by V K Ahuja
- “Law Relating To Intellectual Property Rights” by R Radhakrishnan and S Balasubramanian
- “Law Relating to Intellectual Property, 2011 (Reprint)” by B L Wadehra

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
(With effect from the Academic Year 2026-2027)
Skill Enhancement Course (SEC)

Semester II

4.B Skill Enhancement Course (SEC)	
4.B.a Office Automation II	
Course Objectives and Course Outcomes	
Course Objectives:	
CObj 1	To enhance students' proficiency in advanced Excel functions and analytical tools.
CObj 2	To develop skills in managing, analyzing, and summarizing large datasets for business use.
CObj 3	To introduce Excel-based decision-making and task automation techniques.
Course Outcomes:	
COut 1	Learners will be able to apply advanced functions and data analysis tools to interpret and analyze business data.
COut 2	Learners will be able to create Pivot Tables, Pivot Charts, and apply validation techniques for meaningful insights.
COut 3	Learners will be able to create Pivot Tables, Pivot Charts, and apply validation techniques for meaningful insights.

Modules at a Glance

Office Automation II		
Module No.	Modules	No. of Lectures
1.	Advanced Functions and Data Analysis	15
2.	Business Analytics and Automation	15
Total No. of Lectures:		30

Module No.	Modules
1	Advanced Functions and Data Analysis
	<ul style="list-style-type: none"> • Logical functions for decision-making • Lookup functions for data retrieval • Use of information and text functions • Application of statistical functions for data analysis • Use of Excel's Data Analysis tools for interpreting datasets
2	Business Analytics and Automation
	<ul style="list-style-type: none"> • Building and maintaining large data lists • Creating and formatting Pivot Tables • Creating Pivot Charts for business insights • Data Validation techniques to ensure accuracy • Advanced Conditional Formatting • What-If Analysis tools, such as Goal Seek and Scenario Manager • Recording and executing simple macros for task automation

Sr. No.	List of Suggested Practicals
1	To apply logical functions for decision-making tasks.
2	To use lookup, information, and text functions for data management.
3	To apply statistical functions and data analysis tools to interpret datasets.
4	To create and analyze Pivot Tables and Pivot Charts.
5	To use Data Validation and advanced Conditional Formatting techniques.
6	To apply What-If Analysis tools for business and financial decision-making

7	To automate routine tasks using recorded macros
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Office Automation II

Question Paper Pattern (Academic Year: 2026-27)

Semester End Practical Examination - 50 Marks

A] Semester End Practical Examination: 50 Marks

Duration - 2 Hours

Sr. No.	Component	Marks
01	Practical Question 1	15
02	Practical Question 2	15
03	Journal	10
04	Viva and Attendance	10
Total		50

Reference Books:

1. John Walkenbach, *Excel 2021 Bible*, Wiley.
2. Wayne L. Winston, *Microsoft Excel Data Analysis and Business Modelling*, Microsoft Press.
3. Michael Alexander & Dick Kusleika, *Excel Power Tools for Data Analysis*, Wiley.

**Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
(With effect from the Academic Year 2026-2027)**

Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System

Semester II

5. Ability & Value Enhancement Courses/Indian Knowledge System	
5.A. Ability Enhancement Course	
5.A.a Language and Literature - II	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To understand the effective use of PowerPoint presentation, relevance, and importance of conducting meetings
CObj 2	To teach the formats of letter writing
CObj 3	To enable the learners to adapt to the requirements of the industry.
Course Outcomes	
COut 1	The learners learn to use statistical tools in power point presentations, write letters of enquiry and letters of complaint.
COut 2	Learners can prepare flyers and leaflets help the learners demonstrate their creativity
COut 3	The learners are able to write different types of reports.
COut 4	The learners can analyze all forms of group communication and are able to appropriately use them.
COut 5	Learners understand the importance of following the steps to conduct the meetings.
COut 6	Learners are able to apply the steps taught for an effective communication.
COut 7	The learners understand the role and the scope of work of a chairman.
COut 8	Data is analyzed and the learner is able to present the same in the form of a report.
COut 9	Learners are able to create effective presentations

Modules at a Glance

Language and Literature - II		
Sr. No.	Modules	No. of Lectures
1	Presentation Skills & Group Communication	15
2	Business Correspondence	15
3	Language and Writing Skills	15
Total		45

Sr. No.	Modules
1	Group Communication
	<ul style="list-style-type: none"> ● Interviews: Group Discussion Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit ● Presentations: Business Pitching, Deck, How to improve presentations, Use of PPT& Canva ● Meetings: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions ● Conference: Meaning and Importance of Conference Organizing ● Cross-Cultural & Global Communication: Understanding Cultural Differences, Barriers, Managing Global Teams
2	Business Correspondence
	<ul style="list-style-type: none"> ● Employment Contract: Types, Written Agreement (not tested), Offer Letter, Appointment Letter ● Only following to be taught in detail: Letters of Inquiry, Letters of Complaints, Claims, Adjustment, Sales Letters, Consumer Grievance Letters
3	Language and Writing Skills
	<ul style="list-style-type: none"> ● Reports: Parts, Types of Reports, Format of Report writing ● Summarization: Identification of main and supporting/sub points Presenting these in a cohesive manner

Question Paper Pattern (Academic Year: 2026-2027)
Language and Literature - II
Semester End Examination and Internal Evaluation – 100 Marks
Semester II

A] Internal Evaluation - 40 Marks

Method of Evaluation	Marks
Interviews, Group Discussion	20
Promotional Leaflets, Start-up Ideation: Deck, Presentation	20
Total	40

B] Semester End Examination (SEE)- 60 Marks**Maximum Marks: 60****Duration: 2 Hours****Note: 1. All questions are compulsory.****2. All questions carry equal marks.**

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question E. Theory / Case study/ Concept-based question	25	20
Q-2	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question E. Theory / Case study/ Concept-based question	25	20
Q-3	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question E. Theory / Case study/ Concept-based question	25	20
	Total	75	60

Books and References:

- Agarwal, AnjuD(1989) A Practical Handbook for Consumers, IBH.
- Alien, R.K.(1970) Organisational Management through Communication.
- Ashley,A(1992) A Handbook Of Commercial Correspondence, Oxford University Press.
- Aswathapa, K (1991)Organisational Behaviour, Himalayan Publication, Mumbai.
- Atreya N and Guha (1994) Effective Credit Management, MMC School of Management, Mumbai.
- Bahl,J.C. and Nagamia,S.M. (1974) Modern Business Correspondence and Minute Writing.
- Balan,K.R. and Rayudu C.S. (1996) Effective Communication, Beacon New Delhi.
- Bangh, Lsue, Fryar,Maridell and Thomas David A. (1998) How to Write First Class Business Correspondence, N.T.C. Publishing Group USA
- Banerjee, Bani P (2005) Foundation of Ethics in Management Excel Books
- Businessworld Special Collector's Issue: Ethics and the Manager
- Barkar, Alan(1993) Making Meetings Work, Sterling Publications Pvt. Ltd., New Delhi.
- Basu,C.R.(1998) Business Organisation and Management, T.M.H.New Delhi.
- Benjamin, James (1993) Business and Professional Communication Concepts and Practices, Harper Collins College Publishers, New York.
- Bhargava and Bhargava91971) Company Notices, Meetings and Regulations
- Black, Sam (1972) Practical Public Relations, E.L.B.S. London.
- BoveeCourtland, L and Thrill, John V(1989) Business Communication, Today McGraw Hill, New York, Taxman Publication.
- Burton, G and Thakur, (1995) Management Today- Principles and Practices. T.M.H.,New Delhi.
- Darrow, Richard, Forrstal, Dan and Coolman, Aubrey (1967) Public Relations Handbook, TheDartwellCo., Chicago.
- Dayal, Ishwar(9810) Managing Large Organizations: A Comparative Study.
- Drucher,P.F.(1970) Technology, Management and Society, Pan Books London
- Drucher,P.F.(1974)Management Responsibilities Practices, Heinemann, London.
- Eyre, E.C. (1985), Effective Communication Made Simple, Rupa and Co.Calcutta
- Ecouse Barry, (1999), Competitive Communication: A Rhetoric for Modern Business, OUP.
- Ecouse Barry, (1999), Competitive Communication: A Rhetoric for Modern Business, OUP.
- Fisher Dalmar, (1999), Communication in Organisation, Jaico Pub House, Mumbai, Delhi.
- Frailley, L.E. (1982) Handbook of Business Letters, Revised Edn. Prentice Hall Inc.
- French, Astrid (1993) Interpersonal Skills. Sterling Publishers, New delhi.

Teaching Pedagogy:

Lectures/ tutorials/ field work/ outreach activities/ project work/ vocational training/ viva/ seminars / term papers/ assignments / presentations / self-study/case studies etc. or a combination of some of these. Sessions shall be interactive in nature to enable peer group learning.

Syllabus of Courses of F.Y.BSc (Finance and Artificial Intelligence)
(With effect from the Academic Year 2026-2027)
Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System

Value Enhancement Course

Semester II

5. Ability & Value Enhancement Courses/Value Enhancement Course	
5. B. Value Enhancement Course	
5. B. a Personal Financial Planning	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	Develop a foundational understanding of personal financial planning and its importance in achieving financial goals and overall financial well-being.
CObj 2	Familiarize students with the principles, theories, and concepts underlying personal financial planning. Introduce students to the various components of personal financial planning, including budgeting, savings, investments, risk management, and retirement planning.
CObj 3	Provide an overview of different financial products and instruments available for personal financial planning, such as savings accounts, stocks, bonds, mutual funds, insurance policies, and retirement accounts. Discuss the role of taxes and tax planning in personal finance.
CObj 4	Explore the ethical considerations and professional standards in personal financial planning. Equip students with the skills to evaluate financial information, analyze personal financial situations, and make informed decisions.
Course Outcomes	
COut 1	Learner develops a comprehensive personal financial plan that incorporates budgeting, savings, investments, risk management, and retirement planning.
COut 2	Learners understand how to apply financial principles and theories to analyze personal financial situations and make informed decisions.
COut 3	Learner demonstrates an understanding of different financial products and instruments, including their features, benefits, and risks.
COut 4	Learners evaluate various financial products for personal financial goals .
COut 5	Learners develop skills in budgeting, tracking expenses, and managing personal cash flow effectively.
COut 6	Learners develop skills to evaluate and manage financial risks through appropriate insurance coverage and risk management strategies.
COut 7	Learners understand the importance of retirement planning and develop strategies to achieve retirement goals.
COut 8	Learners understand tax planning strategies to minimize tax liabilities and optimize personal finances.
COut 9	Learner understands the basic investor psychology towards personal financial goals.
COut10	Learner demonstrates knowledge of ethical considerations and professional standards in personal financial planning.

Modules at a Glance

Personal Financial Planning		
Sr. No.	Modules	No. of Lectures
1	Personal Financial Planning Process & Statement Analysis	15
2	Financial Mathematics	15
3	Investor Psychology	15
Total No. of Lectures:		45

Sr. No	Modules
1	Personal Financial Planning Process & Statement Analysis
	<ol style="list-style-type: none"> 1. Establish and Define the Relationship with the Client 2. Gathering relevant information 3. Analyze financial status, Risk Profile and Determine Financial Goals 4. Develop Financial Planning Recommendations and Present them to the Client 5. Implement Client's Financial Planning Recommendations 6. Monitor and Review the performance 7. Cash inflows and outflows – Cash Management 8. Income and expenditure statement 9. Budgeting and forecasting 10. Monitoring budgets and provisions for savings 11. Personal Balance sheet and Net Worth
2	Financial Mathematics
	<ol style="list-style-type: none"> 1. Calculation of Returns-Nominal Rate of Return, Effective Rate of Return, Internal Rate of Return, and Compounded Annual Growth rate (CAGR), Real Rate of Return, Rate of Return after adjusting taxes, Analysis of Return. 2. Time value of money 3. Loan Calculations 4. Total Asset, Net Worth and Financial Ratios
3	Investor Psychology
	<ol style="list-style-type: none"> 1. Value investing and Behavioral Finance 2. Role of emotions in finance decision making –Common errors 3. Skewness of Asset Allocation due to cultural or historical bias 4. Basic investment style and its drawbacks

Ability & Value Enhancement Courses/Value Enhancement Course

Question Paper Pattern (Academic Year: 2026-2027)

Personal Financial Planning

Internal Examination & Semester End Examination – 100 Marks

A] Internals-40 Marks (any two)

Methods of evaluation	Total marks
1. Assignment	20
2. Written Test	20
TOTAL	40

B] Semester End Examination (SEE)- 60 Marks

Maximum Marks: 60

Duration: 2 Hours

Note: (1) All questions are Compulsory.

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question E. Theory / Case study/ Concept-based question	25	20
Q-2	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question E. Theory / Case study/ Concept-based question	25	20
Q-3	Attempt any four of the following. A. Theory / Case study/ Concept-based question B. Theory / Case study/ Concept-based question C. Theory / Case study/ Concept-based question D. Theory / Case study/ Concept-based question E. Theory / Case study/ Concept-based question	25	20
	Total	75	60

Reference Books (with Chapters):

- Financial Management, Theory and Practice by Prasanna Chandra
- Financial Management by Pearson
- Padhuka's Students Guide on Financial Management
- Financial Accounting by P.C. Tulsian
- Retire Rich by P V Subramanyam
- Let's Talk Money by Monika Halan
- The Richest Engineer by Abhishek Kumar
- You can get rich too: With goal-based investing by PV Subramanyam and M Pattabiraman
- I will teach you to be rich by Ramit Seth