

SCHEME & SYLLABI for BACHELOR OF VOCATION In Banking, Financial Services and Insurance

(w.e.f. session 2026-2027)

(As per NEP 2020 & UGC Curriculum and Credit Framework for Undergraduate Programmes – CCFUP)

(Choice Based Credit System with Multiple Entry & Exit and NSQF/NCrF Alignment)



COMMUNITY COLLEGE OF SKILL DEVELOPMENT

**J.C. BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA, FARIDABAD
SECTOR-6, FARIDABAD, HARYANA-121006**

J. C. Bose University of Science and Technology, YMCA, Faridabad

(formerly YMCA University of Science and Technology)

A State Govt. University established vide State Legislative Act No. 21 of 2009

SECTOR-6, FARIDABAD, HARYANA-121006

VISION

“J.C. Bose University of Science and Technology, YMCA, Faridabad aspires to be a nationally and internationally acclaimed leader in technical and higher education in all spheres which transforms the life of students through integration of teaching, research and character building.”

MISSION

- To contribute to the development of science and technology by synthesizing teaching, research and creative activities.
- To provide an enviable research environment and state-of-the-art technological exposure to its scholars.
- To develop human potential to its fullest extent and make them emerge as world class leaders in their professions and enthuse them towards their social responsibilities.

Community College of Skill Development (CCSD)

VISION

“To be a centre of excellence in vocational and skill-based higher education that produces competent, self-reliant and industry-ready professionals with sound technical skills, ethical values and a spirit of innovation and lifelong learning.”

MISSION

- To impart quality vocational education integrating theory, hands-on practice and on-the-job training aligned with NSQF/NCrF and industry standards.
- To strengthen employability and entrepreneurship through competency-based, outcome-oriented and skill-intensive curricula.
- To foster multiple entry and exit pathways that empowers learners to progress seamlessly across academic and vocational qualifications.

ABOUT THE COMMUNITY COLLEGE OF SKILL DEVELOPMENT (CCSD)

The Community College of Skill Development (CCSD) at J.C. Bose University of Science and Technology, YMCA, Faridabad, was established to advance the national skill-development agenda through industry-aligned, competency-based vocational education under the National Skills Qualifications Framework (NSQF) and the National Credit Framework (NCrF). CCSD offers Bachelor of Vocation (B.Voc.), Diploma and Post-Graduate Diploma programmes that blend academic rigour with extensive practical training, workshops and on-the-job training (OJT) in partnership with industry and Sector Skill Councils.

ABOUT THE PROGRAMME

The B.Voc. Banking, Financial Services and Insurance (BFSI) programme is designed in accordance with NEP 2020 and the UGC Curriculum and Credit Framework for Undergraduate Programmes (CCFUP). It incorporates a flexible credit-based system, multidisciplinary learning, and multiple entry-exit options with NSQF/NCrF-aligned qualifications at each year of study. The programme integrates academic learning with practical training through BFSI laboratories, digital learning resources, industry interaction, internships, and on-the-job training. The curriculum is aligned with NSQF standards and industry requirements and equips learners with professional competencies for careers in banking, financial services, insurance, taxation, and related sectors. The programme prepares graduates for employment, entrepreneurship, and career progression in the rapidly evolving BFSI industry.

TABLE 1 PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO1	To enable students to understand the various components of the Indian Banking and Financial System along with their functioning and operations.
PEO2	To Provide students with comprehensive knowledge of the functioning of financial markets, financial institutions, and related services.
PEO3	To develop students' ability to analyze, classify, evaluate, and manage various types of financial risks for effective decision-making.
PEO4	To prepare students to perform professionally in marketing, operational, and managerial activities related to financial markets and institutions.

TABLE 2 PROGRAMME OUTCOMES (POs)

PO1	Demonstrate knowledge and practical skills related to banking, financial institutions, financial markets, and various financial services offered by the BFSI sector.
PO2	Apply concepts and practices related to mutual funds, insurance, microfinance, credit services, securities markets, and other financial products to address customer and organizational requirements.
PO3	Develop proficiency in computer applications, accounting software, spreadsheet tools emerging technologies used in the BFSI sector.
PO4	Understand banking operations, customer relationship management, service quality, and customer engagement practices for effective service delivery.
PO5	Apply financial management principles, credit appraisal techniques, risk assessment tools, taxation concepts, and investment analysis for informed decision-making.
PO6	Collect, analyze, interpret, and present financial and business data using appropriate quantitative, qualitative, and research methodologies.
PO7	Demonstrate ethical conduct and understanding regulatory frameworks, compliance requirements, KYC norms, AML guidelines, taxation laws, and industry best practices applicable to the BFSI sector.
PO8	Develop employability skills, communication abilities, teamwork, leadership qualities, entrepreneurial mindset, and a commitment to continuous learning for career advancement in the BFSI industry.

TABLE 3 PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO1	Acquire state-of-the-art knowledge in banking and finance and develop competencies required for the financial sector.
PSO2	Gain practical exposure through application-based learning, industry interaction, and hands-on training in banking and financial services.

TABLE 4 SUSTAINABLE DEVELOPMENT GOALS (SDGs) ADDRESSED

SDG 4	Quality Education — inclusive, equitable quality education and lifelong learning.
SDG 8	Decent Work and Economic Growth — productive employment and decent work for all.
SDG 9	Industry, Innovation and Infrastructure — resilient infrastructure and sustainable industrialization.
SDG 10	Reduced Inequalities — Financial inclusion and reduction of economic inequalities.

TABLE 5 COURSE CODES AND DEFINITIONS (UGC CCFUP CATEGORIES)

L	Lecture
T	Tutorial
P	Practical
DSC	Discipline Specific Course (core vocational/technical)
DSC Lab	Discipline Specific Laboratory / Workshop
MDC	Multidisciplinary Course
AEC	Ability Enhancement Course (language & communication)
VAC	Value Added Course
SEC	Skill Enhancement Course
OJT	On-Job Training / Industrial Training
Project	Project / Field Work
MOOC	Massive Open Online Course (SWAYAM/NPTEL)

J. C. BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA, FARIDABAD
COMMUNITY COLLEGE OF SKILL DEVELOPMENT (CCSD)
SCHEME OF STUDIES & EXAMINATIONS
THREE-YEAR BACHELOR OF VOCATION (B.Voc.) PROGRAMME IN
Banking, Financial Services and Insurance
SEMESTER I – VI (w.e.f. Session 2026-27) (As per NEP 2020 & UGC CCFUP)

TABLE 6 B.VOC. Credit Structure

SEMESTER	DSC	MIC	AEC	MDC	VAC	SEC	Project	Total
I	12	2	—	3	3	—	—	20
II	12	2	—	3	3	—	—	20
III	12	4	4	—	—	—	—	20
IV	13	4	—	3	—	—	—	20
V	12	6	—	—	—	—	2	20
VI	—	—	—	—	—	20	—	20
Total	61	18	4	9	6	20	2	120

Note:

- a) A student has to earn at least 3 credits during the duration of the degree by passing at least one MOOC course of a minimum 12-week duration (carrying at least 3 credits) through the SWAYAM / NPTEL platform.
- b) A student has to earn 1 credit for the Tree Plantation Activity.

MANDATORY INDUCTION PROGRAMME

When new students enter the institution, they come with diverse thoughts, backgrounds and preparations. It is important to help them adjust to the new environment and inculcate in them the ethos of the institution with a sense of larger purpose. A mandatory Induction Programme for the B.Voc. students entering the institution shall be conducted right at the start. Normal classes will begin only after the Induction Programme is over. There is no fixed time limit prescribed for the programme; its duration may be decided by the College/Department as appropriate. Its purpose is to make students feel comfortable in their new environment, open them up, set a healthy daily routine, create bonding within the batch as well as between faculty and students, and develop awareness, sensitivity and understanding of the self, the people around them, society at large, and nature.

Tentative activities which may be planned in this Induction Programme are as follows:

- Physical Activity
- Creative Arts
- Universal Human Values
- Literary Activities
- Proficiency Modules
- Lectures by Eminent People
- Visits to Local Area / Industry
- Familiarization to the College / Trade & Innovations

GUIDELINES FOR TREE PLANTATION AND CARE

As approved in the Academic Council, Tree Plantation is a mandatory activity for every student admitted to J. C. Bose University of Science and Technology, YMCA, Faridabad.

Instructions for Students:

1. **Tree Plantation:** Each admitted student is required to plant at least 2-5 tree saplings during his/her first or second semester at any place of their choice at/near their home (e.g., parks, grounds, etc.). The student must capture geo-tagged photographs of the planted saplings (with the student present in the photo) and take proper care of their growth.
2. **Submission of Documents:** The student has to submit geo-tagged photographs of the planted saplings on the University ERP platform in the prescribed format, including name of plant, date of plantation and any additional information.
3. **Ongoing Care and Monitoring:** After plantation, every student will take care of these plants and submit updated geo-tagged photos for subsequent years. The plantation document will be submitted once every year for (N-1) times, where N is the total duration of the programme. For example, a student of a 3-year B.Voc. Programme has to submit the plantation document for two consecutive years, i.e., up to the pre-final year, indicating the growth and survival of the sapling.
4. **Tree Survival:** The student must ensure the successful survival of at least one tree out of the 2-5 initially planted, to be eligible for the degree.
5. **Verification of Documents:** Verification will be done by the respective teacher-coordinator at each successive year during Practical Examinations towards the end of the semester, as per the notified academic calendar.
6. **Certificate of Achievement:** The certificate for an eligible student will be auto-generated and may be downloaded from the ERP platform after due verification, fulfilling the requirement for degree conferral.

EXIT CRITERIA

For J. C. Bose University of Science and Technology, YMCA, under the NEP 2020 and UGC CCFUP framework, the exit criteria generally require students to secure a minimum of 40% marks in the end-term examinations, in accordance with the University Examination Ordinance. In addition, students must fulfil the prescribed overall credit requirements to be eligible for the different exit options — UG Certificate, UG Diploma or B.Voc. Degree — aligned with the multiple entry and exit provisions of the National Education Policy, the National Skills Qualifications Framework (NSQF) / National Credit Framework (NCrF), and the guidelines of the University Grants Commission. Each year of study is mapped to a corresponding NSQF level: Year 1 → NSQF 4.5, Year 2 → NSQF 5.0, and Year 3 → NSQF 5.5.

TABLE 7 EXIT OPTION DETAILS

S.No.	NSQF Level	Semester	Exit Options	Credits	Additional Credits for Exit	Exit Criteria
1.	4.5	Sem I & II	U.G. Certificate (Banking, Financial Services and Insurance)	40	4	Minimum 4–6 weeks of Industrial Internship OR online discipline specific skill courses at the relevant NCRF/NSQF level from NSQF/SSC/SWAYAM/NPTEL/any other recognized certifying agency (comprising either two courses of 2 credits each or one course of 4 credits) OR a Technical Project.
2.	5.0	Sem I–IV	U.G. Diploma (Banking, Financial Services and Insurance)	80	4	Minimum 4–6 weeks of Industrial Internship OR online discipline specific skill courses at the relevant NCRF/NSQF level from NSQF/SSC/SWAYAM/NPTEL/any other recognized certifying agency (comprising either two courses of 2 credits each or one course of 4 credits) OR a Technical Project.

Exit Option for U.G. Certificate (Level 4.5): Any student opting for exit after the second semester will get a UG Certificate provided he/she earns 40 credits in the first two semesters and an additional 4 credits based on the exit options as per Table 7. Thus, he/she will be eligible to exit with 44 credits. The Internship Report / Certificate Course / Technical Project would be evaluated by an approved panel of experts.

EMPLOYMENT PATHWAYS AFTER EXIT	
Exit Qualification	U.G. Certificate
NSQF / NCrF Level	4.5
Associated Industry Sectors	Commercial Banks, NBFCs, Microfinance Institutions (MFIs), Mutual Fund Companies / AMCs, and Financial Service Distribution Firms
Mapped Job Roles	Customer Service Associate (Financial Services), Credit Processing Executive, Mutual Fund Distributor and Sales Executive (Financial Products/Services)
Further Progression	Possibility of re-entry into higher semesters through the Academic Bank of Credits (ABC).

Exit Option for U.G. Diploma (Level 5.0): Any student opting for exit after the fourth semester will get a UG Diploma provided he/she earns 40 credits of Semesters I & II, 40 credits of Semesters III & IV, and an additional 4 credits based on the exit options as per Table 7. Thus, he/she will be eligible to exit with 84 credits. The Internship Report / Certificate Course / Technical Project would be evaluated by an approved panel of experts.

EMPLOYMENT PATHWAYS AFTER EXIT	
Exit Qualification	U.G. Diploma
NSQF / NCrF Level	5.0
Associated Industry Sectors	Commercial Banks, NBFCs, Accounting & Tax Consultancy Firms, and Financial Advisory Firms
Mapped Job Roles	Senior Service Associate (Banking)/ Relationship Officer, Credit Analyst, Account Assistant, GST Assistant and Personal Finance Associate
Further Progression	Possibility of re-entry into higher semesters through the Academic Bank of Credits (ABC).

Criteria for B.Voc. Degree (Level 5.5): A student completing all six semesters will be awarded the B.Voc. Degree on earning 40 credits of Semesters I & II, 40 credits of Semesters III & IV, and 40 credits of Semesters V & VI (Industrial Training / OJT), subject to the MOOC and Tree-Plantation requirements. The full programme therefore carries 120 + 3* (MOOC) + 1# (Tree Plantation) credits.

EMPLOYMENT PATHWAYS AFTER EXIT	
Exit Qualification	B.Voc. Degree
NSQF / NCrF Level	5.5
Associated Industry Sectors	Banks and Financial Institutions, Credit Rating & Lending Organizations, Financial Planning & Wealth Management Firms, and Research and Consulting Organizations.
Mapped Job Roles	Credit Processing Officer, Senior Credit Analyst, Financial Planner and Business Research Associate/Junior Data Analyst (Financial Services).
Further Progression	Possibility of progression to higher studies through the Academic Bank of Credits (ABC).

NSQF JOB-ROLE & NATIONAL OCCUPATIONAL STANDARDS (NOS) ALIGNMENT

This section maps each year-end NSQF exit point of the B.Voc. Banking, Financial Services and Insurance programme to the appropriate Qualification Pack (QP) / Job Role and aligns the relevant National Occupational Standards (NOS) to specific subjects of the scheme, with brief justifications.

Year 1 → NSQF 4.5, Year 2 → NSQF 5.0, Year 3 → NSQF 5.5.

Year-wise NSQF Alignment (Summary)

Exit Year	NSQF Level	Job Role	QP Code / NQR	Sector / Council	NOS Aligned
Year 1 (Sem I & II)	4.5	Customer Service Associate (Financial Services)	BSC/Q8406*	BFSI Sector Skill Council	7NOS
Year 2 (Sem III & IV)	5.0	Account Assistant / Tally Operator	BSC/Q8103*	BFSI Sector Skill Council	6 NOS
Year 3 (Sem V & VI)	5.5	Credit Processing Officer	BSC/Q2304*	BFSI Sector Skill Council	5 NOS

*Note: The job roles identified above are mapped to the currently available Qualification Packs (QPs) of the BFSI Sector Skill Council, most of which are presently available at NSQF Levels 4.0 and 4.5. While the programme exit levels are aligned with NSQF/NCrF Levels 4.5 (UG Certificate), 5.0 (UG Diploma), and 5.5 (UG Degree), the curriculum provides higher-level competencies through advanced coursework, laboratory training, internships, projects, and OJT, enabling graduates to undertake progressive responsibilities in the BFSI sector.

YEAR 1 EXIT — NSQF Level 4.5 (Semesters I & II)

Job Role: Customer Service Associate (Financial Services)
QP Code: BSC/Q8406 NQR / Ref: QG-04-BF-04465-2025-V2-BFSI Occupation: Marketing and Sales Sector: Banking, Financial Services and Insurance (BFSI)

NOS - Course Alignment

NOS Code	NOS Title	Aligned Course(s)	Justification (Brief)
BSC/N8422	Handle customer queries in Financial services	Indian Banking System & Institutions, Professional Communication Skills, Marketing of Financial Services.	Develops understanding of banking and financial products, customer requirements, and communication techniques required to effectively respond to customer queries.
BSC/N8423	Resolve Customer Issues and Service Requests	Indian Banking System & Institutions, Indian Financial system and Marketing of Financial Services.	Enables learners to understand financial service processes, customer grievance handling, service recovery, and resolution of customer requests in banking and financial service environments.
BSC/N8424	Process customer transactions in financial services	Banking Operations Lab, Securities operations Lab, Computer Application and Data visualization, E-Commerce and Digital Marketing and Marketing of Financial Services.	Provides practical exposure to transaction processing, account-related services, securities operations, digital payment systems, and customer transaction handling using technology-enabled platforms.
BSC/N8425	Maintain customer records and ensure compliance	Marketing and Marketing of Financial Services, Professional Communication Skills, Office Skill Lab, Computer Application and Data visualization	Develops competencies in customer documentation, record maintenance, data handling, professional correspondence, and compliance with KYC, AML, and organizational procedures.
DGT/VSQ/N0102	Employability Skills	Professional Communication Skills, Computer Application and Data visualization and E-Commerce and Digital Marketing	Enhances communication, teamwork, problem-solving, digital literacy, customer orientation, workplace ethics, and professional behavior required for successful employment in the BFSI sector.
BSC/N8426 (optional)	Assist in Loan Processing	Microfinance operations and its lab.	Guide customers through the loan application process, ensuring all mandatory fields are filled accurately and ensure compliance with KYC
BSC/N8427 (optional)	Support Investment and Wealth Management Services	Mutual Fund Operations and its lab, Indian Financial markets, & Investment and securities operations Lab	Explain different investment products such as mutual funds, fixed deposits, bonds, stocks, and insurance plans, highlighting their features, benefits, and risks.

YEAR 2 EXIT — NSQF Level 5.0 (Semesters III & IV)

Job Role: Account Assistant / Tally Operator
QP Code: BSC/Q8103 NQR / Ref: QG-04-BF-04470-2025-V2-BFSI Occupation: Finance & Accounts Sector: Banking, Financial Services and Insurance (BFSI)

NOS -Course Alignment

NOS Code	NOS Title	Aligned Course(s)	Justification (Brief)
BSC/N8108	Prepare tax compliance related document	Financial Accounting, Tally Accounting Lab, Taxation in BFSI and Basic Taxation & GST Lab	Develops skills in preparation of tax records, GST documentation, invoices, statutory returns, and compliance-related records.
BSC/N8109	Prepare and perform payroll functions	Financial Accounting, Tally Accounting Lab, Taxation in BFSI and Basic Taxation & GST Lab	Provides knowledge of salary computation, statutory deductions, payroll processing, and maintenance of employee-related records.
BSC/N8110	Prepare receipt and payment voucher	Financial Accounting, Tally Accounting Lab, Taxation in BFSI and Basic Taxation & GST Lab	Enables learners to prepare accounting vouchers, record business transactions, and maintain financial records using accounting software
BSC/N8111	Understand and book Credit purchases and sales	Financial Accounting, Tally Accounting Lab, Taxation in BFSI and Basic Taxation & GST Lab	Develops competencies in recording credit transactions, maintaining ledgers, preparing GST-compliant entries, and accounting for business transactions.
BSC/N8112	Prepare Financial Statements	Financial Accounting, Tally Accounting Lab, Taxation in BFSI and Basic Taxation & GST Lab	Equips learners with skills to prepare and interpret Trading Account, Profit & Loss Account, and Balance Sheet using manual and computerized accounting systems.
DGT/VSQ/N0102	Employability Skills	Tally Accounting Lab, Basic Taxation & GST Lab and Professional communication Skills and Business Statistics.	Enhances digital literacy, accuracy, problem-solving, professional ethics, documentation skills, and workplace readiness required in accounting and taxation functions.

YEAR 3 EXIT — NSQF Level 5.5 (Semesters V & VI)

Job Role: Credit Processing Officer
QP Code: BSC/Q2304 NQR / Ref: QG-4.5-BF-04463-2025-V2-BFSI Occupation: Retail Asset Management/Central Processing Sector: Banking, Financial Services and Insurance (BFSI)

NOS -Course Alignment

NOS Code	NOS Title	Aligned Course(s)	Justification (Brief)
BSC/N2313	Verify and process loan applications	Microfinance operations and its lab. Retail Banking Operations, Credit Risk Management and Credit Management Lab	Develops competencies in loan application scrutiny, borrower assessment, documentation verification, credit appraisal, and loan processing procedures.
BSC/N2314	Ensure compliance with regulatory and internal guidelines	Microfinance operations and its lab. Retail Banking Operations, Credit Risk Management, Credit Management Lab and Legal Aspects of Business	Provides understanding of RBI regulations, lending policies, KYC requirements, compliance procedures, and legal aspects governing credit operations.
BSC/N2315	Coordinate with stakeholders for loan approval and disbursement	Microfinance operations and its lab. Retail Banking Operations, Credit Risk Management, Credit Management Lab and project	Builds skills in stakeholder coordination, credit proposal preparation, loan approval workflow, customer interaction, and disbursement processes.
BSC/N2316	Maintain Customer records and communication	Microfinance operations lab. Credit Management Lab, BFSI Office Skill Lab Business Statistics and project	Develops abilities in record maintenance, documentation management, customer communication, data handling, reporting, and monitoring of borrower information.

NOS Code	NOS Title	Aligned Course(s)	Justification (Brief)
DGT/VSQ/N0102	Employability Skills	Business management and entrepreneurship essentials, BFSI Office Skill Lab and Professional Communication Skills	Enhances communication, teamwork, digital proficiency, professional ethics, problem-solving ability, and workplace readiness required in lending and credit operations.

Rationale for the NSQF 5.5 UG Degree:At the UG Degree level (NSQF 5.5), learners demonstrate advanced cognitive and practical skills acquired through specialized BFSI courses in Semester V and extensive industry exposure through Semester VI On-the-Job Training (OJT)/Internship. Graduates are capable of performing analytical, supervisory, compliance, advisory, and decision-support functions independently while adhering to regulatory and professional standards in the BFSI sector.

Co-anchor NSQF Roles

Role / QP	Strongest Scheme Link	Rationale
Microfinance Executive (BSC/Q2401)	Microfinance Operations, Microfinance Operations Lab and Retail Banking Operations	Develops competencies in microfinance models, SHG/MFI operations, loan processing, borrower assessment, financial inclusion, credit monitoring, and RBI guidelines applicable to microfinance institutions.
Mutual Fund Distributor (BSC/Q3802)	Mutual Fund Operations, Mutual Fund Operations Lab, Indian Financial System & Securities Markets, Marketing of Financial Services	Provides knowledge of mutual fund products, SIP/SWP/STP, investor servicing, distribution practices, regulatory framework, and customer acquisition skills required for mutual fund distribution.
Insurance Agent (BSC/Q3801)	Insurance Operations & Regulations, Insurance Operations Lab, Marketing of Financial Services, Business Communication Skills	Covers insurance products, policy servicing, claims process, insurance regulations, customer advisory skills, and sales communication required for insurance distribution.
Junior Data Analyst – Financial Services (BSC/Q4101)	Business Statistics, Business Research Methods, BFSI office skill Lab, and Research Project	Builds analytical skills through data handling, statistical techniques, spreadsheet analysis, reporting, dashboard preparation, and interpretation of financial data for decision-making.
Essentials of Personal Finance (BSC/N3202)	Financial Management, Financial Management and Planning Lab, Taxation in BFSI, and Mutual Fund Operations	Enables understanding of budgeting, savings, investments, taxation, risk management, retirement planning and personal financial decision-making.

J. C. BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA, FARIDABAD
Community College of Skill Development (CCSD)
B.Voc. Banking, Financial Services and Insurance
[NSQF Level 4.5, UG Regular]

TABLE 8
SCHEME FOR SEMESTER – I

Course Code	Course Title	Teaching Schedule				Teaching Hours			Marks for Sessional	Marks for End Term Examinations		Total Marks	Credits	Course Type
		L	T	P	Total	L	P	O/A		Theory	Practical			
BIV-107-V1	Indian Financial System and Markets	4	0	0	4	60	0	60	40	60		100	4	DSC
BIV-105-V1	Indian Banking System and Institutions	4	0	0	4	60	0	60	40	60		100	4	DSC
BIV-101-V1	Business Economics	2	0	0	2	30	0	30	40	60		100	2	MIC
BIV-111-V1	Banking Operations Lab	0	0	4	4	0	60	0	25		25	50	2	DSC
BIV-109-V1	Investment & Securities Operations Lab	0	0	4	4	0	60	0	25		25	50	2	DSC
VAC-201-V1	Indian Knowledge System	3	0	0	3	45	0	45	40	60		100	3	VAC
BIV-103-V1	E-Commerce and Digital Marketing	3	0	0	3	45	0	45	40	60		100	3	MDC
	Total	16	0	8	24	240	120	240	250	300	50	600	20	

J. C. BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA, FARIDABAD
Community College of Skill Development (CCSD)
B.Voc. Banking, Financial Services and Insurance
[NSQF Level 4.5, UG Regular]

TABLE 9
SCHEME FOR SEMESTER – II

Course Code	Course Title	Teaching Schedule				Teaching Hours			Marks for Sessional	Marks for End Term Examinations		Total Marks	Credits	Course Type
		L	T	P	Total	L	P	O/A		Theory	Practical			
BIV-106-V1	Microfinance Operations	4	0	0	4	60	0	60	40	60		100	4	DSC
BIV-102-V1	Mutual Fund Operations	4	0	0	4	60	0	60	40	60		100	4	DSC
BIV-104-V1	Marketing of Financial Services	2	0	0	2	30	0	30	40	60		100	2	MIC
BIV-108-V1	Microfinance Operations Lab	0	0	4	4	0	60	0	25		25	50	2	DSC
BIV-110-V1	Mutual Fund Operations Lab	0	0	4	4	0	60	0	25		25	50	2	DSC
ESU-205-V1	Environmental Science	3	0	0	3	45	0	45	40	60		100	3	VAC
AMV-105-V1	Computer Applications and Data Visualization	3	0	0	3	45	0	45	40	60		100	3	MDC
	Total	16	0	8	24	240	120	240	250	300	50	600	20	

Exit Option for U.G. Certificate (Level 4.5): Any student opting for exit after the second semester will get a UG Certificate on earning 40 credits of the first two semesters plus additional 4 credits as per Table 7 (total 44 credits).

J. C. BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA, FARIDABAD
Community College of Skill Development (CCSD)
B.Voc. Banking, Financial Services and Insurance
[NSQF Level 5.0, UG Regular]

TABLE 10
SCHEME FOR SEMESTER – III

Course Code	Course Title	Teaching Schedule				Teaching Hours			Marks for Sessional	Marks for End Term Examinations		Total Marks	Credits	Course Type
		L	T	P	Total	L	P	O/A		Theory	Practical			
	Retail Banking Operations	4	0	0	4	60	0	60	40	60		100	4	DSC
	Financial Accounting	4	0	0	4	60	0	60	40	60		100	4	DSC
	Business Statistics	4	0	0	4	60	0	60	40	60		100	4	MIC
	Tally Accounting Lab	0	0	4	4	0	60	0	25		25	50	2	DSC
	BFSI Office Skills Lab	0	0	4	4	0	60	0	25		25	50	2	DSC
	Professional Communication Skills	4	0	0	4	60	0	60	40	60		100	4	AEC
	Total	16	0	8	24	240	120	240	210	240	50	500	20	

J. C. BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA, FARIDABAD
Community College of Skill Development (CCSD)
B.Voc. Banking, Financial Services and Insurance
[NSQF Level 5.0, UG Regular]

TABLE 11
SCHEME FOR SEMESTER – IV

Course Code	Course Title	Teaching Schedule				Teaching Hours			Marks for Sessionals	Marks for End Term Examinations		Total Marks	Credits	Course Type
		L	T	P	Total	L	P	O/A		Theory	Practical			
	Financial Management	4	0	0	4	60	0	60	40	60		100	4	DSC
	Taxation in BFSI	4	0	0	4	60	0	60	40	60		100	4	DSC
	Organizational Behavior	4	0	0	4	60	0	60	40	60		100	4	MIC
	Financial Management and Planning Lab	0	0	4	4	0	60	0	25		25	50	2	DSC
	Basic Taxation & GST Lab	0	0	6	6	0	90	0	25		25	50	3	DSC
	Business Management and Entrepreneurship Essentials	3	0	0	3	45	0	45	40	60		100	3	MDC
	Total	15	0	10	25	225	150	225	210	240	50	500	20	

Exit Option for U.G. Diploma (Level 5.0): Any student opting for exit after the fourth semester will get a UG Diploma on earning 40 + 40 credits of the first four semesters plus additional 4 credits as per Table 7 (total 84 credits).

J. C. BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA, FARIDABAD
Community College of Skill Development (CCSD)
B.Voc. Banking, Financial Services and Insurance
[NSQF Level 5.5, UG Regular]

TABLE 12
SCHEME FOR SEMESTER – V

Course Code	Course Title	Teaching Schedule				Teaching Hours			Marks for Sessional	Marks for End Term Examinations		Total Marks	Credits	Course Type
		L	T	P	Total	L	P	O/A		Theory	Practical			
	Credit Risk Management	4	0	0	4	60	0	60	40	60		100	4	DSC
	Insurance Operations & Regulations	4	0	0	4	60	0	60	40	60		100	4	DSC
	Business Research Methods	3	0	0	3	45	0	45	40	60		100	3	MIC
	Legal Aspects of Business	3	0	0	3	45	0	45	40	60		100	3	MIC
	Credit Management Lab	0	0	4	4	0	60	0	25		25	50	2	DSC
	Insurance Operations Lab	0	0	4	4	0	60	0	25		25	50	2	DSC
	Project	0	0	4	4	0	60	0	25		25	50	2	Project
	Total	14	0	12	26	210	180	210	235	240	75	550	20	

J. C. BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA, FARIDABAD
Community College of Skill Development (CCSD)
B.Voc. Banking, Financial Services and Insurance
[NSQF Level 5.5, UG Regular]

TABLE 13
SCHEME FOR SEMESTER – VI

Course Code	Course Title	Schedule (hours)	Credits	Marks for sessional	Marks for End Term Examination	Total marks
	Industrial Training / On-Job Training (OJT)	600	17	150	350	500
	Program Elective-I	0	03	40	60	100
	Total	600	20	190	410	600

LIST OF PROGRAM ELECTIVE COURSES

Course Code	Course Title
	Financial Planning and Personal Finance
	Financial Inclusion and Government Financial Schemes
	FinTech and Digital Financial Services
	Ethics and Professional Practices in BFSI
	Banking Laws and Customer Rights

Note: During Semester VI the student undergoes full-time Industrial Training / OJT in industry, supplemented by a Training Report and a Seminar/Presentation.

Procedure for Evaluation of Industrial Training:

(A) End-Term (350 Marks): Training Report 100; Training Seminar 100; Training Viva 150.

(B) Continuous Assessment (150 Marks): Assessment by Internal Faculty 50; Assessment by Industrial Guide 100.

DETAILED SYLLABI

INDIAN FINANCIAL SYSTEM AND MARKETS

BIV-107-V1

No of Credits: 4**Sessional: 40 Marks**

L	T	P	Total
4	-	-	4

Theory: 60 Marks**Total: 100 Marks**

Course Objective: The course aims to equip learners with the knowledge of Indian financial system and basic skills required to operate in various security markets. It will help them in understanding the stock exchanges operating in India and their trading mechanism.

Course Outcomes (COs): At the end of the course, the student shall be able to:

CO1: Understand the structure, components and functions of the financial system in India.

CO2: Explore various financial markets, institutions and instruments and their role in the Indian economic development.

CO3: Explain the depository system, types of depositories and their functions.

CO4: Provide comprehensive understanding of the stock exchanges, their market operations, trading and settlement procedures and their regulations.

CO–PO Mapping:

Course Outcomes (COs)	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/Team)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	3	2	-	1	1	–	–	2
CO2	3	2	1	1	1	–	1	3
CO3	2	2	3	1	2	–	–	-
CO4	3	3	2	1	3	-	1	-

Correlation levels: 1 = Low, 2 = Medium, 3 = High; “–” = No correlation.

CO–PSO Mapping:

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	3	1
CO2	3	1
CO3	3	2
CO4	3	2

Course Contents:

Unit 1: Introduction to Indian Financial System

Meaning, Characteristics, Significance and Components of Financial system in India. Evolution and structure of Indian financial system, Current developments in the Indian Financial Sector and emerging financial products and instruments. Overview and structure of the Indian securities market.

Unit 2: Indian Securities Markets

Capital Market: Definition, characteristics, Structure and types of Indian capital market: Primary vs. secondary market, different types of securities in India: Equity vs. Debt, Equity shares vs. Preference shares. Money market: Introduction, Money Market Instruments, Structure and Developments in Money Market, Debt Market- role and functions, Instruments of debt market, Option and future: put option, call option and types of future contract.

Unit 3: Depository System

Introduction to Depository Needs for a depository, Depository participants (DP), Account Opening with DP (DMAT), Depository System in India and its Legal framework, Brief description of NSDL and CDSL. Functions of a DP: Dematerialization, Rematerialization, IPO, Trading and Settlement. Other services: Nomination & Transmission of shares, Pledge & Hypothecation.

Unit 4: Infrastructural Institutions

Meaning, features, and functions of stock exchanges. Overview of BSE and NSE. Trading and settlement mechanism in stock exchanges. Stock Index: **Sensex** and **Nifty**; basic understanding of their construction and significance. SEBI: Organization, objectives, functions and roles of SEBI, Role of SEBI and stock exchanges in investor protection.

Textbooks & References:

1. Bharati V. Pathak – *The Indian Financial System: Markets, Institutions and Services*, Pearson Education.
2. M.Y. Khan – *Indian Financial System*, McGraw Hill Education.
3. Vasant Desai – *The Indian Financial System and Development*, Himalaya Publishing House.
4. E. Gordon and K. Natarajan – *Financial Markets and Services*, Himalaya Publishing House.
5. L.M. Bhole and Jitendra Mahakud – *Financial Institutions and Markets: Structure, Growth and Innovations*, McGraw Hill Education.
6. NISM Series V-A – *Mutual Fund Distributors Certification Examination Workbook*, National Institute of Securities Markets.
7. NCFM Modules – *Financial Markets: A Beginner's Module*, National Stock Exchange (NSE).
8. SEBI Investor Education Publications, Securities and Exchange Board of India.
9. Reserve Bank of India (RBI) – Publications and Reports on Financial Markets and Financial System.

Suggested Tutorial / Sessional Assignments:

1. Prepare a chart showing the structure and components of the Indian Financial System and explain the role of each component.
2. Compare the functions and instruments of the Money Market and Capital Market with suitable examples.
3. Study the services offered by any Depository Participant (DP) and prepare a report on the process of opening a Demat account.
4. Analyze the role of NSDL and CDSL in promoting paperless securities transactions in India.
5. Compare the features and trading mechanisms of NSE and BSE and prepare a presentation.
6. Track the movement of Sensex or Nifty for a period of one month and interpret the major factors influencing market fluctuations.
7. Visit the websites of RBI, SEBI, NSE, or BSE and prepare a brief report on their functions and recent initiatives.
8. Analyze the process of trading and settlement in the securities market through a flow chart.
9. Prepare a comparative report on different categories of investors in the securities market such as retail investors, institutional investors, and foreign portfolio investors.
10. Create a glossary of important financial market terms such as IPO, Demat, NAV, Derivatives, Margin Trading, Settlement Cycle, etc.
11. Study recent developments in the Indian Financial System and present their implications for investors and financial institutions.
12. Prepare a project report on the role of financial markets in promoting financial inclusion and economic development in India.

INDIAN BANKING SYSTEM AND INSTITUTIONS

BIV-105-V1

No of Credits: 4**Sessional: 40 Marks**

L	T	P	Total
4	-	-	4

Theory: 60 Marks**Total: 100 Marks**

Course Objective: The course aims to equip learners with the basic knowledge of banking products and services, the structure of the Indian banking system, and the role of banking institutions in economic development. It also provides an understanding of the regulatory framework governing banks and the role of RBI in maintaining financial stability.

Course Outcomes (COs): At the end of the course, the student shall be able to:

CO1: Understand the structure, evolution, and functioning of the Indian banking system and various types of banks operating in India.

CO2: Explain the features and significance of banking products, services, financial inclusion initiatives, and customer-bank relationships.

CO3: Examine the regulatory framework governing banks in India, including the role of RBI, monetary policy, and management of Non-Performing Assets (NPAs).

CO4: Assess the role of development banks and non-banking financial institutions in promoting economic growth and financial development.

CO–PO Mapping:

Course Outcomes	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/T eam)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	3	2	–	2	1	–	–	2
CO2	3	2	1	3	1	1	–	3
CO3	3	2	–	2	3	–	1	2
CO4	3	3	–	1	2	–	1	3

Correlation levels: 1 = Low, 2 = Medium, 3 = High; “–” = No correlation.

CO–PSO Mapping:

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	3	1
CO2	3	2
CO3	3	1
CO4	3	1

Course Contents:

Unit 1: Indian Banking System

Overview and evolution of the Indian Banking System, Structure of the Indian Banking Industry, Overview of the Banking, Financial Services and Insurance (BFSI) sector in India. Role and importance of banks in economic development. Types of banking and banks in India—Commercial Banks, Cooperative Banks, Regional Rural Banks, Small Finance Banks, Payment Banks, and Specialized Banks.

Unit 2: Commercial Banking and Customer Services

Introduction to Commercial Banking and Credit Creation by Commercial Banks, Banking Products and Services—Deposit Accounts, Loans, Advances, Cards, and Digital Banking Services. Financial Inclusion and Financial Exclusion. Customer-Banker Relationship and Customer Service. Banking Ombudsman and Grievance Redressal Mechanism.

Unit 3: Regulatory Framework of Banks

Reserve Bank of India (RBI): Constitution, Organization, Objectives and Functions. RBI Act, 1934 and Banking Regulation Act, 1949. Credit Control—Objectives and Methods of Credit Control. Quantitative and Selective Credit

Control Measures. Monetary Policy: Meaning, Objectives and Instruments. Non-Performing Assets (NPAs): Concept, Asset Classification, Income Recognition and Provisioning Norms.

Unit 4: Development Banks and Non-Banking Financial Institutions

Role of Development Banks and Financial Institutions in Economic Development. Introduction to Non-Banking Financial Institutions (NBFIs): Meaning, Features and Functions. Development Banks in India—SIDBI, NABARD and EXIM Bank: Objectives, Functions and Significance. Emerging role of development financial institutions in promoting inclusive growth and entrepreneurship.

Textbooks & References:

1. Gordon, E. & Natarajan, K. – *Banking Theory, Law and Practice*, Himalaya Publishing House.
2. Sundharam, K.P.M. & Varshney, P.N. – *Banking Theory, Law and Practice*, Sultan Chand & Sons.
3. Shekhar, K.C. & Shekhar, L. – *Banking Theory and Practice*, Vikas Publishing House.
4. Indian Institute of Banking & Finance (IIBF) – *Principles and Practices of Banking*, Macmillan Education.
5. Pathak, Bharati V. – *The Indian Financial System: Markets, Institutions and Services*, Pearson Education.
6. Gupta, S.B. – *Monetary Economics: Institutions, Theory and Policy*, S. Chand & Company.
7. RBI Publications and Annual Reports.
8. NABARD, SIDBI and EXIM Bank Publications.
9. RBI Master Circulars and Financial Stability Reports.

Suggested Tutorial / Sessional Assignments:

1. Prepare a chart showing the structure of the Indian Banking System and classify different types of banks operating in India.
2. Compare Commercial Banks, Cooperative Banks, Regional Rural Banks, and Small Finance Banks.
3. Study the banking products and services offered by any commercial bank and prepare a report.
4. Analyze the role of banks in promoting financial inclusion in India.
5. Prepare a case study on any government initiative related to financial inclusion such as PMJDY or DBT.
6. Visit the RBI website and prepare a report on its major functions and recent policy measures.
7. Compare the objectives and instruments of monetary policy used by RBI.
8. Study the causes and impact of NPAs on the banking sector and suggest remedial measures.
9. Analyze the role of the Banking Ombudsman in customer grievance redressal.
10. Compare the functions of banks and non-banking financial institutions.
11. Conduct a survey on the usage of digital banking services among customers and present the findings.
12. Analyze recent developments in the Indian banking sector and their impact on customers and financial institutions.
13. Prepare a project report on the contribution of the banking sector to economic growth and financial development in India.

BUSINESS ECONOMICS

BIV-101-V1

No of Credits: 2**Sessional: 40 Marks**

L	T	P	Total
2	-	-	2

Theory: 60 Marks**Total: 100 Marks**

Course Objective: The course aims to familiarize learners with the fundamental concepts of microeconomics and their application in business decision-making. It enables students to understand demand and supply mechanisms, consumer behavior, production decisions, cost structures, and market dynamics relevant to the business environment.

Course Outcomes (COs): At the end of the course, the student shall be able to:

CO1: Demonstrate understanding of basic concepts and theories of microeconomics relevant to business decisions.

CO2: Analyze demand, supply, elasticity, and consumer behavior in different business situations.

CO3: Explain production functions, cost concepts, and output decisions for business organizations.

CO4: Evaluate different market structures and pricing decisions under varying competitive conditions.

CO–PO Mapping:

Course Outcomes	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/Team)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	2	3	–	–	–	–	1	2
CO2	2	3	–	1	–	–	2	2
CO3	2	3	–	1	–	–	2	1
CO4	2	3	–	1	–	–	3	2

Correlation levels: 1 = Low, 2 = Medium, 3 = High; “–” = No correlation.

CO–PSO Mapping:

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	2	-
CO2	2	1
CO3	2	1
CO4	2	1

Course Contents:

Unit 1: Introduction to Business Economics and Demand Analysis

Nature, scope and significance of Business Economics. Microeconomics vs Macroeconomics. Basic economic problems: What to produce, How to produce, For whom to produce, and optimum utilization of resources. Production Possibility Curve (PPC) and its applications. Demand: Meaning, demand function, demand schedule, demand curve and Law of Demand. Individual and Market Demand. Exceptions to the Law of Demand. Changes in Demand and factors affecting demand.

Unit 2: Elasticity of Demand, Supply and Consumer Behaviour

Elasticity of Demand: Meaning, types and measurement of Price Elasticity, Income Elasticity and Cross Elasticity of Demand. Law of Supply: Meaning, supply function, supply schedule, supply curve and factors affecting supply. Market Equilibrium and determination of equilibrium price. Utility Analysis: Cardinal and Ordinal Utility Approaches. Law of Diminishing Marginal Utility and Law of Equi-Marginal Utility. Indifference Curve Analysis, Budget Line and Consumer Equilibrium.

Unit 3: Production and Cost Analysis

Factors of Production and Production Function. Law of Variable Proportions and Returns to Scale. Cost Concepts: Short-run and Long-run Costs, Total Cost, Average Cost and Marginal Cost. Relationship between Average Cost and Marginal Cost. Break-even Analysis. Economies and Diseconomies of Scale.

Unit 4: Market Structures and Price Determination

Market Structure: Meaning and Features. Perfect Competition, Monopoly, Monopolistic Competition and Oligopoly. Price and Output Determination under Different Market Structures. Concept of Price Discrimination. Equilibrium of a Firm under Various Market Conditions.

Textbooks & References:

1. Ahuja, H.L. – *Business Economics*, S. Chand Publishing.
2. Jain, T.R. & Ohri, V.K. – *Micro Economics*, VK Global Publications.
3. Dwivedi, D.N. – *Business Economics*, Vikas Publishing House.
4. Mithani, D.M. – *Managerial Economics*, Himalaya Publishing House.
5. Mehta, P.L. – *Managerial Economics: Analysis, Problems and Cases*, Sultan Chand & Sons.
6. Geetika, Ghosh, Piyali & Choudhury, Purba Roy – *Managerial Economics*, McGraw Hill Education.
7. Lipsey, Richard G. & Chrystal, K. Alec – *Economics*, Oxford University Press.
8. RBI Publications and Economic Surveys (Selected Readings).

Suggested Tutorial / Sessional Assignments:

1. Prepare a chart explaining the basic economic problems and their relevance in business decision-making.
2. Draw and explain the Production Possibility Curve (PPC) under different economic situations.
3. Study a real-life example where the Law of Demand does not hold and explain the reasons.
4. Calculate different types of elasticity of demand using hypothetical data.
5. Analyze the impact of price changes on demand for banking or financial products.
6. Prepare demand and supply schedules and determine market equilibrium.
7. Analyze the production process of a small business and identify factors of production.
8. Calculate total cost, average cost, and marginal cost using given numerical data.
9. Prepare a Break-even Analysis for a hypothetical business venture.
10. Identify examples of economies and diseconomies of scale from real business organizations.
11. Compare different market structures with suitable business examples.
12. Study pricing strategies adopted by firms operating under monopoly and competitive markets.
13. Prepare a project report on the impact of market competition on consumer welfare.

BANKING OPERATIONS LAB

BIV-111-V1

No of Credits: 2**Sessional: 25 Marks**

L	T	P	Total
-	-	4	4

Practical: 25 Marks**Total: 50 Marks**

Course Objective: The course aims to provide practical exposure to basic banking operations, customer on boarding procedures, KYC compliance requirements, digital banking services, and common banking documentation used in day-to-day branch operations.

Course Outcomes (COs): At the end of the course, the student shall be able to:

CO1: Identify different types of bank accounts and perform basic account opening procedures.

CO2: Understand and complete KYC documentation and customer identification requirements.

CO3: Explain and demonstrate various banking channels, payment systems, and digital banking services.

CO4: Understand customer service practices, basic credit information systems, and recent trends in banking operations.

CO–PO Mapping:

Course Outcomes	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/Team)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	3	2	2	2	1	–	–	2
CO2	3	2	2	2	3	–	–	1
CO3	2	2	3	2	2	–	1	1
CO4	3	2	2	3	2	1	1	3

Correlation levels: 1 = Low, 2 = Medium, 3 = High; “–” = No correlation.

CO–PSO Mapping:

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	2	3
CO2	2	3
CO3	2	3
CO4	2	3

Course Contents:

Unit 1: Customer On-boarding and Account Opening

Types of bank accounts: Savings Account, Current Account, Fixed Deposit Account and Recurring Deposit Account. Account opening process and account opening forms. Documents required for account opening. Customer Information File (CIF). Introduction to KYC and Customer Due Diligence (CDD).

Unit 2: Customer Identification and Banking Documentation

Aadhaar: Structure, features and e-KYC process. PAN: Structure, significance and verification. Linking Aadhaar and PAN. Nomination facility and deposit insurance. Introduction to TDS in banking. Basic customer documentation and record maintenance.

Unit 3: Payment Systems and Deposit Operations

Payment and Settlement Systems in India. MICR, IFSC and SWIFT Codes. NEFT, RTGS, IMPS and UPI. Savings Bank interest calculation. Fixed Deposit and Recurring Deposit operations. Introduction to digital banking services.

Unit 4: Digital Banking, Customer Service and Credit Information

ATM services: Types, functions and benefits. Internet Banking and Mobile Banking. Customer service and grievance handling. Banking Ombudsman framework. Introduction to CIBIL score and credit history. Emerging trends in banking: Financial Inclusion, Bancassurance and FinTech services.

Textbooks & References:

1. IIBF – *Principles and Practices of Banking*, Macmillan Education India.
2. E. Gordon & K. Natarajan – *Banking Theory, Law and Practice*, Himalaya Publishing House.
3. K.C. Shekhar & Lekshmy Shekhar – *Banking Theory and Practice*, Vikas Publishing House.
4. Indian Institute of Banking & Finance (IIBF) – *Basics of Banking and Finance*, Taxmann Publications.
5. Reserve Bank of India (RBI) – *Financial Education and Banking Awareness Publications*, RBI.
6. Indian Banks' Association (IBA) – *Customer Service in Banks: Codes and Guidelines*, IBA Publications.

Suggested Tutorial / Sessional Assignments:

1. Filling and verification of specimen account opening forms.
2. Preparation of KYC document checklist for different categories of customers.
3. Identification and interpretation of IFSC, MICR and SWIFT codes.
4. Demonstration of NEFT, RTGS, IMPS and UPI transaction formats.
5. Calculation of interest on Savings, Fixed Deposit and Recurring Deposit accounts.
6. Observation and reporting of ATM functions and services.
7. Demonstration of Internet Banking and Mobile Banking features.
8. Preparation of customer profiles and KYC verification reports.
9. Analysis of factors affecting CIBIL scores using sample cases.
10. Role-play on customer query handling and grievance redressal.
11. Study of financial inclusion initiatives and banking services.
12. Report on recent digital banking and FinTech developments

INVESTMENT AND SECURITIES OPERATIONS LAB

BIV-109-V1

No of Credits: 2**Sessional: 25 Marks**

L	T	P	Total
-	-	4	4

Practical: 25 Marks**Total: 50 Marks**

Course Objective: The course aims to provide practical exposure to investment avenues, securities markets, stock exchanges, depository services, and basic securities trading operations.

Course Outcomes (COs): At the end of the course, the student shall be able to:

CO1: Understand various investment avenues and the structure of the Indian securities market.

CO2: Analyze the features and functioning of money market and capital market instruments.

CO3: Demonstrate understanding of stock exchange operations, depository services, and Demat account procedures.

CO4: Understand IPO processes, stock trading mechanisms, settlement procedures, and stock indices.

CO–PO Mapping:

Course Outcomes	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/Team)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	3	2	1	—	1	—	1	2
CO2	3	2	1	1	1	—	1	2
CO3	2	2	3	1	2	—	—	1
CO4	3	3	2	1	3	—	1	2

Correlation levels: 1 = Low, 2 = Medium, 3 = High; “—” = No correlation.

CO–PSO Mapping:

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	2	2
CO2	3	2
CO3	3	3
CO4	3	3

Course Contents:**Unit 1: Introduction to Investment and Securities Market**

Concept and objectives of investment. Risk and return in investment. Various investment alternatives: Bank Deposits, Post Office Schemes, Mutual Funds, Insurance, Bonds, Equity Shares, Gold and Government Securities. Structure of Indian Securities Market. Overview of Capital Market and Money Market.

Unit 2: Financial Instruments and Market Operations

Capital Market Instruments: Equity Shares, Preference Shares, Debentures and Bonds. Money Market Instruments: Treasury Bills, Commercial Papers, Certificates of Deposit and Commercial Bills. Primary Market and Secondary Market. Role and functions of market intermediaries. Introduction to SEBI and investor protection.

Unit 3: Stock Exchanges and Depository Operations

Working of NSE and BSE. Over-the-Counter (OTC) Market. Depository System in India. NSDL and CDSL. Demat Account: Features, benefits and account opening process. Dematerialization and Rematerialization of securities.

Unit 4: IPO, Trading and Settlement Mechanism

Process of listing a company on stock exchanges. Initial Public Offering (IPO) process. Share trading process. Trading and settlement cycle. Stock indices: Sensex and Nifty. Basic calculation and interpretation of stock market indices.

Textbooks & References:

1. Prasanna Chandra – *Investment Analysis and Portfolio Management*, McGraw Hill Education.
2. Punithavathy Pandian – *Security Analysis and Portfolio Management*, Vikas Publishing House.
3. L. M. Bhole & Jitendra Mahakud – *Financial Institutions and Markets*, McGraw Hill Education.
4. E. Gordon & K. Natarajan – *Financial Markets and Services*, Himalaya Publishing House.
5. NCFM – *Financial Markets: A Beginner's Module*, National Stock Exchange (NSE).
6. NISM Series VIII – *Equity Derivatives Certification Examination Workbook*, National Institute of Securities Markets.
7. SEBI Investor Education Publications.
8. NSE and BSE Investor Awareness Material.

Suggested Tutorial / Sessional Assignments:

1. Compare different investment avenues based on risk, return and liquidity.
2. Prepare a report on major money market instruments and their features.
3. Study the structure and functioning of NSE and BSE through their official websites.
4. Analyze the role of SEBI in investor protection.
5. Simulate the process of opening a Demat account and prepare the required documentation checklist.
6. Study the services offered by NSDL and CDSL.
7. Track the movement of Sensex or Nifty for one month and prepare a performance report.
8. Study a recently launched IPO and analyze its issue details.
9. Prepare a flowchart showing the securities trading and settlement process.
10. Compare primary market and secondary market transactions using practical examples.
11. Collect and analyze share price data of any listed company.
12. Prepare a report on recent developments in Indian securities markets.

INDIAN KNOWLEDGE SYSTEM VAC-201-V1

No of Credits: 3**Sessional: 40 Marks**

L	T	P	Total
3	-	-	3

Theory: 60 Marks**Total: 100 Marks**

Course Objective: The course aims to provide an understanding of the foundations of Indian Knowledge Systems, highlight India's contributions in diverse fields of knowledge, familiarize students with traditional approaches to holistic development and ethical living, and emphasize the relevance of Indian knowledge traditions in contemporary education, professions, and society.

Course Outcomes (COs): At the end of the course, the student shall be able to:

CO1: Explain the origin, scope, and foundational principles of Indian Knowledge Systems.

CO2: Describe contributions of ancient India in science, mathematics, astronomy, and linguistics traditions.

CO3: Examine Indian approaches to health, architecture, environment, and sustainable living practices.

CO4: Apply principles of Indian ethics, governance, and management traditions in personal and professional life.

CO–PO Mapping:

Course Outcomes	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/Team)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	2	1	–	–	–	2	2	2
CO2	2	2	1	–	1	1	1	2
CO3	1	1	–	1	1	2	3	2
CO4	2	2	–	2	1	3	2	3

Correlation levels: 1 = Low, 2 = Medium, 3 = High; "–" = No correlation.

CO–PSO Mapping:

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	1	1
CO2	1	1
CO3	1	1
CO4	2	1

Course Contents:

Unit 1: Foundations of Indian Knowledge Systems

Concept, meaning and significance of Indian Knowledge Systems; Sources of Indian knowledge including Vedas, Upanishads, Puranas and Epics; overview of major philosophical systems (Darshanas); fundamental principles and relevance of IKS in modern education and society.

Unit 2: Indian Knowledge Traditions in Science, Mathematics and Linguistics

Scientific traditions in ancient India; contributions of Aryabhata, Brahmagupta and Baudhayana; arithmetic, geometry, trigonometry and Vedic mathematics; Indian astronomy; Panini's contribution to linguistics; introduction to Vakyashastra and Pramanashastra.

Unit 3: Indian Traditions in Health, Wellness, Architecture and Sustainable Living

Indian perspective of psychology and holistic development; Ashtanga Yoga and Rasa Siddhanta; introduction to Ayurveda and preventive healthcare; principles of Vastushastra and traditional architecture; ancient Indian city planning and sustainable living practices.

Unit 4: Indian Knowledge Systems in Governance and Management

Indian economic thought in Arthashastra and Nitishastra; leadership, motivation and financial management in Indian traditions; ethics and value-based governance; indigenous entrepreneurship and community economy.

Textbooks & References:

1. Mahadevan, B., Bhat, V. R., & Pavana, R. N. (2022), Introduction to Indian Knowledge System: Concepts and Applications, PHI Learning Pvt. Ltd., New Delhi.
2. Radhakrishnan, S. (2009), Indian Philosophy (Vol. I & II). Oxford University Press, New Delhi.
3. Kapoor, Kapil & Singh, Avadhesh Kumar (Eds.), (2019). Indian Knowledge Systems: Knowledge Traditions and Practices of India, Indian Institute of Advanced Study, Shimla.
4. Kangle, R. P. (Ed. & Trans.). (2010 Reprint), The Kautiliya Arthashastra (Parts I–III), Motilal Banarsidass Publishers Pvt. Ltd., Delhi.
5. Daegens, Bruno. (2007), Mayamatam: Indian Treatise on Housing, Architecture and Iconography, Indira Gandhi National Centre for the Arts, New Delhi.
6. Dave, N. V. (2002), Vedanta and Management: Relevance of Vedantic Concepts in Modern Management Practices, Deep & Deep Publications Pvt. Ltd., New Delhi.
7. Rao, S. Balachandra. (2000), Indian Astronomy: An Introduction, Universities Press (India) Pvt. Ltd., Hyderabad.
8. Ramasubramanian, K., Sriram, M. S., & Srinivas, M. D. (2011), Tantrasangraha with Detailed Mathematical Explanatory Notes. Hindustan Book Agency, New Delhi.
9. Bhate, Saroja. (2002), Panini's Grammar: An Overview. Sahitya Akademi, New Delhi.
10. Ramachandrudu, P. (2010), Glimpses into Kautilya's Arthashastra, Sanskrit Academy, Hyderabad.
11. Tirthaji Maharaj, Jagadguru Swami Sri Bharati Krishna. (1965), Vedic Mathematics, Motilal Banarsidass Publishers Pvt. Ltd., Delhi

E-COMMERCE AND DIGITAL MARKETING

BIV-103-V1

No of Credits: 3**Sessional: 40 Marks**

L	T	P	Total
3	-	-	3

Theory: 60 Marks**Total: 100 Marks**

Course Objective: To provide students with fundamental knowledge of e-commerce, digital business models, online marketing strategies, customer engagement, digital payment systems, and emerging technologies used in the digital economy. The course enables learners to understand, manage, and promote online businesses using modern e-commerce and digital marketing tools.

Course Outcomes (COs): At the end of the course, the student shall be able to:

CO1: Explain the concepts, business models, and technologies used in e-commerce and digital business.

CO2: Apply digital marketing techniques including SEO, social media marketing, content marketing, and email marketing for online promotion.

CO3: Demonstrate understanding of e-commerce platforms, online payment systems, customer relationship management, and web analytics tools.

CO4: Evaluate e-commerce operations, digital marketing campaigns, and emerging trends in digital commerce.

CO–PO Mapping:

Course Outcomes	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/Team)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	2	1	2	1	1	—	1	2
CO2	1	2	3	1	1	—	1	2
CO3	2	2	3	2	2	—	1	2
CO4	2	2	2	2	2	1	1	3

Correlation levels: 1 = Low, 2 = Medium, 3 = High; “—” = No correlation.

CO–PSO Mapping:

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	1	1
CO2	1	1
CO3	1	1
CO4	1	1

Course Contents:

Unit 1: Introduction to E-Commerce and Digital Business

Evolution of e-commerce; traditional commerce versus electronic commerce; e-commerce business models (B2B, B2C, C2C, C2B); digital business ecosystem; online marketplaces; mobile commerce; role of e-commerce in entrepreneurship and business growth.

Unit 2: E-Commerce Technologies and Payment Systems

E-commerce website architecture; online stores and product catalogues; shopping carts; payment gateways; digital payment systems; UPI, debit cards, credit cards, mobile wallets and net banking; order processing; inventory management; logistics and fulfilment; security in e-commerce transactions.

Unit 3: Digital Marketing Strategies and Online Promotion

Digital marketing concepts; search engine optimization (SEO); search engine marketing (SEM); content marketing; social media marketing; influencer marketing; email marketing; affiliate marketing; online advertising; digital branding and customer engagement.

Unit 4: Analytics, CRM and Emerging Trends

Customer relationship management (CRM); customer acquisition and retention; web analytics and performance measurement; Google Analytics overview; Online Marketplace Analytics; Customer Behaviour Analytics; key

performance indicators (KPIs); AI-enabled marketing tools; personalization and recommendation systems; ethical and legal issues in e-commerce; career opportunities in e-commerce and digital marketing.

Textbooks & References:

1. Kenneth C. Laudon & Carol Guercio Traver, E-Commerce: Business, Technology, Society.
2. Dave Chaffey, Digital Business and E-Commerce Management.
3. Seema Gupta, Digital Marketing.
4. Puneet Singh Bhatia, Fundamentals of Digital Marketing.
5. Vandana Ahuja, Digital Marketing.
6. Bharat Bhaskar, Electronic Commerce: Framework, Technologies and Applications.

Suggested Tutorial / Sessional Assignments:

1. Compare traditional commerce and e-commerce business models.
2. Study a popular e-commerce platform and identify its business model.
3. Analyze digital payment methods used in online transactions.
4. Prepare a product catalogue for an online store.
5. Conduct keyword research for a selected business.
6. Create a simple SEO checklist for a website.
7. Design a social media marketing campaign.
8. Prepare an email marketing strategy for a small business.
9. Analyze customer reviews and feedback on an e-commerce platform.
10. Prepare a report on emerging trends in e-commerce and digital marketing.

MICROFINANCE OPERATIONS BIV-106-V1

No of Credits: 4

L	T	P	Total
4	-	-	4

Sessional: 40 Marks**Theory: 60 Marks****Total: 100 Marks**

Course Objective: The course aims to provide learners with a comprehensive understanding of microfinance, financial inclusion, microfinance institutions (MFIs), their operational models, products, regulatory framework, and risk management practices. The course also familiarizes students with the role of microfinance in poverty alleviation and socio-economic development.

Course Outcomes (COs): At the end of the course, the student shall be able to:

CO1: Explain the concepts, evolution, significance, and regulatory framework of microfinance and financial inclusion.

CO2: Analyze the operational models, institutional structure, and delivery mechanisms of microfinance institutions.

CO3: Examine various financial and non-financial products and services offered by microfinance institutions.

CO4: Evaluate risks, compliance requirements, ethical practices, and the socio-economic impact of microfinance operations

CO–PO Mapping:

Course Outcomes	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/Team)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	3	2	-	2	1	–	2	2
CO2	3	3	1	2	1	–	1	2
CO3	3	3	1	2	2	–	1	2
CO4	3	3	1	2	3	1	2	3

Correlation levels: 1 = Low, 2 = Medium, 3 = High; “–” = No correlation.

CO–PSO Mapping:

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	3	1
CO2	3	2
CO3	3	2
CO4	3	2

Course Contents:

Unit 1: Introduction to Microfinance and Financial Inclusion

Definition, meaning, scope and importance, Evolution of Microfinance in India, Role of microfinance institutions (MFIs), Different Models of Microfinance, Legal organization structure of MFIs, Financial inclusion and its significance.

Unit 2: Microfinance Institutions and Delivery Models

Microfinance delivery mechanisms in India. Structure of microfinance intermediation. Self-Help Group (SHG)-Bank Linkage Model. MFI Model. Legal and organizational structure of MFIs. Types of MFIs in India. Operational framework and functioning of microfinance institutions. Minimalist versus Integrated Approach in microfinance.

Unit 3: Microfinance Products and Services

Financial products offered by MFIs: Micro-credit, savings, insurance, remittance and pension products. Non-financial services: Financial literacy, skill development, entrepreneurship support and social development services. Product design and delivery mechanisms. Customer-centric microfinance services.

Unit 4: Risk Management, Regulation and Impact Assessment

Types of risks in microfinance: Credit risk, operational risk, repayment risk and liquidity risk. Risk management practices in MFIs. RBI regulations applicable to NBFC-MFIs. Self-regulatory organizations (SROs) in microfinance. Code of Conduct for MFIs. Ethical practices in microfinance. Andhra Pradesh Microfinance Crisis (2010) and Malegam Committee recommendations. Overview of the Micro Finance Institutions (Development and Regulation) Bill, 2012. Impact assessment and monitoring of microfinance programmes.

Textbooks & References:

1. Indian Institute of Banking and Finance (IIBF), *Microfinance: Perspectives and Operations*, Macmillan Education.
2. K. G. Karmakar, *Microfinance in India*, Sage Publications.
3. Muhammad Yunus, *Banker to the Poor: Micro-Lending and the Battle Against World Poverty*, Public Affairs.
4. Beatriz Armendariz & Jonathan Morduch, *The Economics of Microfinance*, MIT Press.
5. Joanna Ledgerwood, *Microfinance Handbook: An Institutional and Financial Perspective*, World Bank Publications.
6. NABARD, *Status of Microfinance in India Reports*.
7. Reserve Bank of India (RBI), *Master Directions and Circulars on Microfinance*.
8. Bharat Microfinance Report, Sa-Dhan Publications.

Suggested Tutorial / Sessional Assignments:

1. Prepare a report on the evolution of microfinance in India and its role in financial inclusion.
2. Compare the SHG-Bank Linkage Model and MFI Model of microfinance.
3. Study the organizational structure and operations of any leading MFI in India.
4. Analyze financial and non-financial services offered by a selected microfinance institution.
5. Examine the impact of microfinance on poverty reduction and rural development.
6. Analyze the Andhra Pradesh Microfinance Crisis (2010) and its implications for the sector.
7. Study RBI regulations applicable to NBFC-MFIs and prepare a compliance summary.
8. Identify major risks faced by MFIs and suggest suitable risk mitigation measures.
9. Conduct a comparative study of microfinance institutions and commercial banks in serving low-income groups.
10. Analyze recent developments and innovations in the Indian microfinance sector.
11. Study the role of NABARD in promoting microfinance and SHGs.
12. Prepare a report on financial inclusion initiatives undertaken by the Government of India.

MUTUAL FUND OPERATIONS BIV-102-V1

No of Credits: 4**Sessional: 40 Marks**

L	T	P	Total
4	-	-	4

Theory: 60 Marks
Total: 100 Marks

Course Objective: The course aims to provide learners with a comprehensive understanding of mutual fund schemes, investment plans, mutual fund distribution practices, performance evaluation techniques, and the regulatory framework governing the mutual fund industry in India.

Course Outcomes (COs): At the end of the course, the student shall be able to:

- CO1:** Analyze various mutual fund schemes, plans, and investment options based on investor needs and objectives.
- CO2:** Explain the structure of the mutual fund industry, distribution channels, and the role of mutual fund distributors.
- CO3:** Compute and interpret key mutual fund performance indicators such as NAV, returns, expense ratio, and risk-adjusted performance measures.
- CO4:** Evaluate the regulatory framework governing mutual funds and the roles of SEBI, RBI, and AMFI in investor protection and industry development

CO–PO Mapping:

Course Outcomes	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/Team)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	3	3	1	2	2	–	1	2
CO2	3	3	1	2	1	–	1	2
CO3	3	3	2	1	3	–	1	2
CO4	3	2	1	2	3	1	1	3

Correlation levels: 1 = Low, 2 = Medium, 3 = High; “–” = No correlation.

CO–PSO Mapping:

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	3	2
CO2	3	2
CO3	3	3
CO4	3	2

Course Contents:

Unit 1: Introduction to Mutual Funds

Meaning, concept, features, advantages and limitations of mutual funds. Key terms and concepts associated with mutual funds. Operational flow of mutual funds. Organizational structure of mutual funds: Sponsor, Trustee, Asset Management Company (AMC), Custodian and Registrar. Types of investors in mutual funds. Types of mutual fund schemes: Open-ended and Close-ended schemes. Allotment of mutual fund units, Time Stamping and Cut-off Time.

Unit 2: Mutual Fund Industry and Distribution Practices

Growth and development of mutual funds in India. Overview of major mutual funds in India including UTI Mutual Fund, SBI Mutual Fund and other leading mutual funds. Systematic Investment Plan (SIP), Systematic Withdrawal Plan (SWP), and Systematic Transfer Plan (STP). Equity Linked Savings Scheme (ELSS). Exchange Traded Funds (ETFs). Common myths and misconceptions about mutual funds.

Fund Distribution and Channel Management Practices: Traditional and new distribution channels. Eligibility and prerequisites for becoming a mutual fund distributor. Commission structure and transaction charges applicable to mutual fund distributors.

Unit 3: Mutual Fund Return Mechanism and Performance Evaluation

Net Asset Value (NAV): Meaning and computation of NAV. Entry Load and Exit Load and their computation. Return from mutual fund investments and computation of returns. Expense Ratio: Meaning, computation and SEBI guidelines regarding expense ratio. Performance Evaluation of Mutual Funds: Risk and Return concepts. Risk-adjusted performance measurement. Sharpe Ratio, Treynor Ratio and Jensen's Alpha: Meaning, computation and interpretation.

Unit 4: Regulatory Framework of Mutual Funds

Overview of the regulatory framework governing the mutual fund industry in India. SEBI guidelines for mutual funds. Overview of SEBI (Mutual Funds) Regulations, 1996. Role of RBI in mutual funds. Association of Mutual Funds in India (AMFI): Objectives, functions and role of AMFI. AMFI Registration Number (ARN). Investment restrictions applicable to mutual fund schemes. Rights and obligations of mutual fund investors. Investor protection measures in the mutual fund industry.

Textbooks & References:

1. Sundar Sankaran, *Indian Mutual Funds Handbook: A Guide for Industry Professionals and Intelligent Investors*, Vision Books.
2. R. K. Mohapatra, *Guide to Indian Mutual Fund Investments*, Notion Press.
3. Albert J. Fredman & Russ Wiles, *How Mutual Funds Work*, Prentice Hall.
4. NISM Series V-A, *Mutual Fund Distributors Certification Examination Workbook*, National Institute of Securities Markets.
5. Prasanna Chandra, *Investment Analysis and Portfolio Management*, McGraw Hill Education.
6. V. A. Avadhani, *Investment and Securities Markets in India*, Himalaya Publishing House.
7. SEBI Investor Education Publications.
8. AMFI Publications and Investor Awareness Material.

Suggested Tutorial / Sessional Assignments:

1. Compare different types of mutual fund schemes and recommend suitable schemes for different categories of investors.
2. Prepare a report on the growth and development of the mutual fund industry in India.
3. Study and compare the features of SIP, SWP and STP.
4. Analyze the features and benefits of ELSS and ETFs.
5. Prepare a profile of any leading mutual fund company operating in India.
6. Study the eligibility requirements and registration process for becoming a mutual fund distributor.
7. Calculate NAV of a mutual fund scheme using hypothetical data.
8. Calculate and interpret expense ratio for selected mutual fund schemes.
9. Evaluate the performance of mutual funds using Sharpe Ratio, Treynor Ratio and Jensen's Alpha.
10. Compare the performance of three mutual fund schemes using risk-return analysis.
11. Prepare a report on recent developments and innovations in the Indian mutual fund industry.
12. Conduct a case study on a successful mutual fund distributor and analyze the factors contributing to success.

MARKETING OF FINANCIAL SERVICES

BIV-104-V1

No of Credits: 2**Sessional: 40 Marks**

L	T	P	Total
2	-	-	2

Theory: 60 Marks**Total: 100 Marks**

Course Objective: The course aims to develop understanding of the concepts, principles, and practices of marketing financial services. It focuses on customer relationship management, promotion and distribution of financial products, digital financial marketing, and emerging trends in the marketing of banking, insurance, mutual fund, and other financial services.

Course Outcomes (COs): At the end of the course, the student shall be able to:

CO1: Explain the concept, nature, scope, and marketing environment of financial services.

CO2: Understand customer needs, customer relationship management, service quality, and customer satisfaction in financial services.

CO3: Analyze promotion and distribution strategies used for banking, insurance, mutual funds, and other financial products.

CO4: Evaluate the role of digital marketing, fintech, and emerging trends in financial services marketing.

CO–PO Mapping:

Course Outcomes	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/Team)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	3	2	1	2	1	–	1	2
CO2	3	2	1	3	2	1	1	2
CO3	3	3	1	2	2	–	1	2
CO4	2	2	2	2	2	1	1	3

Correlation levels: 1 = Low, 2 = Medium, 3 = High; “–” = No correlation.

CO–PSO Mapping:

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	2	1
CO2	3	2
CO3	3	2
CO4	2	2

Course Contents:

Unit 1: Introduction to Marketing of Financial Services

Meaning and concept of service marketing. Nature, characteristics and importance of financial services marketing. Growth and significance of the financial services sector in India. Marketing environment for financial services. Marketing mix (7Ps) in financial services. Emerging trends in financial services marketing.

Unit 2: Customer Relationship Management in Financial Services

Understanding customer needs and expectations. Market segmentation and targeting in banking, insurance, mutual funds and other financial services. Customer Relationship Management (CRM): concept, objectives and importance. Service quality and customer satisfaction. Customer loyalty and retention strategies. Complaint handling, service failure and service recovery.

Unit 3: Promotion and Distribution of Financial Services

Pricing of financial products and services. New service development in financial services. Distribution channels in financial services: branches, agents, brokers, bancassurance, direct selling and digital channels. Challenges in

distribution of financial services. Promotional tools in financial services: advertising, personal selling, sales promotion and public relations.

Unit 4: Digital Marketing and Emerging Trends

Digital marketing in financial services, Role of fintech in marketing financial products. Mobile banking, internet banking and social media marketing. Online consumer behavior in financial services. E-services and self-service technologies. Emerging trends in banking, insurance, mutual fund and wealth management marketing.

Textbooks & References:

1. Christopher Lovelock, Jochen Wirtz & Jayanta Chatterjee, *Services Marketing: People, Technology, Strategy*, Pearson Education.
2. Valarie A. Zeithaml, Mary Jo Bitner & Dwayne D. Gremler, *Services Marketing*, McGraw Hill Education.
3. E. Gordon & K. Natarajan, *Financial Markets and Services*, Himalaya Publishing House.
4. Philip Kotler, Kevin Lane Keller, Alexander Chernev & Jagdish N. Sheth, *Marketing Management*, Pearson Education.
5. Seema Gupta, *Digital Marketing*, McGraw Hill Education.
6. Puneet Singh Bhatia, *Fundamentals of Digital Marketing*, Pearson Education.

Suggested Tutorial / Sessional Assignments:

1. Study and compare marketing strategies used by any two banks.
2. Analyze customer relationship management practices adopted by a financial institution.
3. Examine customer complaint handling and grievance redressal mechanisms in banking services.
4. Prepare a report on service quality dimensions in financial services.
5. Study distribution channels used by insurance companies and mutual fund houses.
6. Compare traditional and digital distribution channels in financial services.
7. Design a promotional campaign for a selected financial product.
8. Analyze social media marketing practices adopted by a bank or fintech company.
9. Prepare a simple digital marketing plan for a mutual fund, insurance, or banking product.
10. Study the role of fintech in transforming financial services marketing.
11. Conduct a survey to identify customer preferences regarding digital financial services.
12. Prepare a presentation on emerging trends in marketing of financial services.

MICROFINANCE OPERATIONS LAB

BIV-108-V1

No of Credits: 2**Sessional: 25 Marks**

L	T	P	Total
-	-	4	4

Practical: 25 Marks**Total: 50 Marks**

Course Objective: The course aims to provide practical exposure to the operational, financial, regulatory, and reporting aspects of Microfinance Institutions (MFIs). It enables learners to understand microfinance operations, analyze financial performance, examine regulatory requirements, and evaluate the role of microfinance in promoting financial inclusion.

Course Outcomes (COs): At the end of the course, the student shall be able to:

CO1: Understand and interpret the financial statements and reporting practices of Microfinance Institutions (MFIs).

CO2: Analyze the revenue model, operational efficiency, and productivity of MFIs.

CO3: Explain RBI guidelines, SHG-Bank Linkage Programme, and financial inclusion initiatives related to microfinance.

CO4: Evaluate the financial health and operational performance of MFIs using financial and non-financial indicators.

CO-PO Mapping:

Course Outcomes	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/Team)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	3	2	2	1	2	–	–	1
CO2	3	3	2	1	2	–	1	2
CO3	2	2	1	1	1	1	2	3
CO4	3	3	2	1	3	1	1	2

Correlation levels: 1 = Low, 2 = Medium, 3 = High; “–” = No correlation.

CO-PSO Mapping:

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	2	3
CO2	3	3
CO3	2	2
CO4	3	3

Course Contents:

Unit 1: Financial Statements and Reporting of MFIs

Introduction to accounting in Microfinance Institutions. Characteristics and components of financial statements. Accounting equation and basic accounting principles. Understanding Balance Sheet, Income and Expenditure Statement, and Cash Flow Statement of MFIs.

Unit 2: Revenue Model and Operational Efficiency of MFIs

Understanding the revenue model of Microfinance Institutions. Sources of income and expenditure in MFIs. Cost-Volume-Profit (CVP) analysis. Measuring operating efficiency and productivity. Key indicators of operational performance. Factors affecting operating expenses.

Unit 3: Group Lending Practices and Regulatory Framework

Group formation and lending procedures under Self-Help Groups (SHGs) and Joint Liability Groups (JLGs). SHG-Bank Linkage Programme. RBI guidelines relating to microcredit and NBFC-MFIs. Integrated Ombudsman Scheme, 2021.

Unit 4: Financial Inclusion and Performance Assessment

Government schemes promoting financial inclusion. Role of microfinance in inclusive growth and poverty alleviation. Financial ratio analysis for MFIs. Assessment of financial health and sustainability of MFIs. Identification of strengths, weaknesses, opportunities, and challenges faced by microfinance institutions.

Textbooks & References:

1. Indian Institute of Banking and Finance (IIBF), *Microfinance: Perspectives and Operations*, Macmillan Education.
2. K. G. Karmakar, *Microfinance in India*, Sage Publications.
3. Muhammad Yunus, *Banker to the Poor: Micro-Lending and the Battle Against World Poverty*, Public Affairs.
4. Beatriz Armendariz & Jonathan Morduch, *The Economics of Microfinance*, MIT Press.
5. Joanna Ledgerwood, *Microfinance Handbook: An Institutional and Financial Perspective*, World Bank Publications.
6. NABARD, *Status of Microfinance in India Reports*.
7. Reserve Bank of India (RBI), *Master Directions and Circulars on Microfinance*.
8. Bharat Microfinance Report, Sa-Dhan Publications.

Suggested Tutorial / Sessional Assignments:

1. Prepare a summary of the financial statements of any MFI.
2. Calculate profitability, liquidity, and efficiency ratios using given MFI data.
3. Analyze the revenue sources of a selected MFI.
4. Compare the operational performance of two MFIs.
5. Prepare a flow chart showing the SHG-Bank Linkage process.
6. Study and summarize RBI guidelines on microfinance lending.
7. Prepare a report on the Integrated Ombudsman Scheme, 2021.
8. Analyze any government scheme promoting financial inclusion.
9. Conduct a SWOT analysis of a selected MFI.
10. Prepare a financial health scorecard using selected performance indicators.

MUTUAL FUND OPERATIONS LAB

BIV-110-V1

No of Credits: 2**Sessional: 25 Marks**

L	T	P	Total
-	-	4	4

Practical: 25 Marks**Total: 50 Marks**

Course Objective: The course aims to provide practical exposure to mutual fund operations, investor servicing, compliance requirements, performance evaluation, and regulatory aspects of the mutual fund industry. The course enables learners to develop hands-on skills related to mutual fund transactions, documentation, analysis, and investor services.

Course Outcomes (COs): At the end of the course, the student shall be able to:

CO1: Perform KYC compliance procedures and mutual fund transaction processes.

CO2: Analyze mutual fund offer documents, annual reports, and investor disclosures.

CO3: Evaluate mutual fund performance and compliance with regulatory guidelines.

CO4: Calculate and interpret key mutual fund metrics such as NAV, returns, loads, and expense ratio.

CO–PO Mapping:

Course Outcomes	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/Team)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	3	2	2	1	2	–	1	1
CO2	3	3	2	1	2	–	1	2
CO3	3	3	2	1	3	1	1	2
CO4	3	3	1	1	3	–	–	1

Correlation levels: 1 = Low, 2 = Medium, 3 = High; “–” = No correlation.

CO–PSO Mapping:

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	2	3
CO2	3	2
CO3	3	3
CO4	3	3

Course Contents:

Unit 1: Mutual Fund Transactions and KYC Compliance

Introduction to mutual fund operational processes. Registration process of an Asset Management Company (AMC). KYC compliance process for mutual fund investors. Documentation requirements and verification procedures. Payment mechanisms for purchase and redemption of mutual fund units. Mutual fund transactions through stock exchanges and online platforms.

Unit 2: Mutual Fund Documents and Investor Services

Offer documents of mutual funds: Scheme Information Document (SID), Statement of Additional Information (SAI), and Key Information Memorandum (KIM). Understanding contents and disclosures in offer documents. Annual reports of mutual funds and their interpretation. Investor services and grievance redressal mechanisms.

Unit 3: Mutual Fund Performance Analysis

Computation of Net Asset Value (NAV). Calculation of returns from mutual fund investments. Understanding cut-off timings and their implications. Calculation of entry load, exit load, and expense ratio. Benchmarking mutual fund performance against market indices and peer funds.

Unit 4: Regulatory Framework and Compliance

Overview of regulatory framework governing mutual funds in India. SEBI regulations and guidelines applicable to mutual funds. AMFI guidelines and code of conduct. Compliance requirements for mutual fund schemes and distributors. Investor protection measures and disclosure standards in the mutual fund industry.

Textbooks & References:

1. Rajesh Chakrabarti & Sankar De, *Fundamentals of Mutual Funds*, Wiley India.
2. Lalit Kumar, *Mutual Funds: The Money Multiplier*, SAGE Publications.
3. Albert J. Fredman & Russ Wiles, *How Mutual Funds Work*, Prentice Hall of India.
4. NISM Series V-A, *Mutual Fund Distributors Certification Examination Workbook*, National Institute of Securities Markets.
5. Sundar Sankaran, *Indian Mutual Funds Handbook*, Vision Books.
6. SEBI (Mutual Funds) Regulations, 1996 and related circulars.
7. Association of Mutual Funds in India (AMFI) Publications and Investor Awareness Material.
8. Official websites of SEBI, AMFI, NSE, BSE, and leading Asset Management Companies.

Suggested Tutorial / Sessional Assignments:

1. Practice the KYC compliance process for mutual fund investments and verify supporting documentation.
2. Simulate purchase and redemption transactions of mutual fund units.
3. Study and analyze the contents of a Scheme Information Document (SID).
4. Examine a Key Information Memorandum (KIM) and identify important disclosures.
5. Analyze annual reports of selected mutual fund schemes.
6. Compute Net Asset Value (NAV) using hypothetical data.
7. Calculate returns from mutual fund investments under different scenarios.
8. Calculate expense ratio, entry load, and exit load for selected schemes.
9. Compare the performance of mutual fund schemes using benchmark indices.
10. Study SEBI and AMFI guidelines applicable to mutual fund operations.
11. Evaluate compliance requirements of mutual fund distributors.
12. Prepare a report on investor protection measures in the mutual fund industry.

ENVIRONMENTAL SCIENCE

ESU-205-V1

No of Credits:3**Sessional: 40 Marks**

L	T	P	Total
3	-	-	3

Theory: 60 Marks**Total: 100 Marks**

Course Objective: The course aims to provide students with an understanding of the interactions between humans and the environment, natural resources, biodiversity, environmental pollution, climate change, and environmental management. It also seeks to develop awareness of sustainable development practices and familiarize students with national and international environmental laws and treaties for promoting responsible environmental stewardship.

Course Outcomes (COs): At the end of the course, the student shall be able to:

- CO1:** Explain the historical evolution of human-environment interactions and the emergence of environmental thought and global environmentalism.
- CO2:** Analyze the classification, utilization, and sustainable management of natural resources, and relate them to the principles of sustainable development.
- CO3:** Evaluate the concepts of biodiversity and ecosystem services, conservation approaches.
- CO4:** Identify major types of environmental pollution and assess their sources, impacts on human health and ecosystems; assess the significance of climate change impacts, adaptation, and mitigation.
- CO5:** Interpret key national and international environmental laws, treaties, and institutional mechanisms aimed at environmental protection and sustainable governance.

CO–PO Mapping:

Course Outcomes	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/Team)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	1	1	–	–	–	2	3	2
CO2	1	2	1	–	1	2	3	2
CO3	1	2	–	–	1	2	3	2
CO4	1	3	1	–	2	2	3	2
CO5	1	2	–	1	1	3	3	2

Correlation levels: 1 = Low, 2 = Medium, 3 = High; “–” = No correlation.

CO–PSO Mapping:

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	1	–
CO2	1	1
CO3	1	1
CO4	1	1
CO5	1	–

Course Contents:

Unit 1: Humans and the Environment

The man-environment interaction: Humans as hunter-gatherers, Mastery of fire, Origin of agriculture, Great ancient civilizations and the environment, Industrial revolution and its impact on the environment, Population growth and natural resource exploitation. The emergence of environmentalism: Anthropocentric and eco-centric perspectives, The Club of Rome- Limits to Growth, UN Conference on Human Environment 1972, World Commission on Environment and Development, Rio Summit.

Unit 2: Natural Resources and Sustainable Development

Definition of resource; Classification of natural resources- biotic and abiotic, renewable and nonrenewable. Biotic resources: Major type of biotic resources- forests, grasslands, wetlands, wildlife and aquatic (fresh water and

marine), Microbes as a resource. Water resources: Types of water resources- fresh water and marine resources, Availability and use, Environmental impact of over-exploitation, issues and challenges, Water scarcity and stress, Conflicts over water. Soil and mineral resources: Important minerals, Mineral exploitation, Environmental problems due to extraction of minerals and use, Soil as a resource and its degradation. Energy resources: Sources of energy and their classification, renewable and non-renewable sources of energy, Conventional energy sources- coal, oil, natural gas, nuclear energy, non-conventional energy sources- solar, wind, tidal, hydro, wave, ocean thermal, geothermal, biomass, hydrogen and fuel cells, Implications of energy use on the environment. Introduction to sustainable development: Sustainable Development Goals (SDGs)

Unit 3: Environmental Issues: Local, Regional and Global

Temporal and spatial extents of local, regional, and global phenomena. Pollution: Types of Pollution- air, noise, water, soil, municipal solid waste, hazardous waste, Transboundary air pollution, Acid rain, Smog. Land use and Land cover change: land degradation, deforestation, desertification, urbanization. Global issues: Ozone layer depletion, Green-house effect, Global Warming, Climate change.

Unit 4: Conservation of Biodiversity and Ecosystems

Ecosystems and ecosystem services: Concept; Structure and Functions of Ecosystem, Ecosystem types forests, wetlands, grasslands, agriculture, coastal and marine; Ecosystem services. Biodiversity and its distribution: Biodiversity as a natural resource, Levels and types of biodiversity, Biodiversity in India and the world, Biodiversity hotspots. Threats to biodiversity, in-situ and ex-situ conservation approach, role of traditional knowledge, community-based conservation.

Unit 5: Environmental Pollution and Health

Definition of pollution; Point sources and non-point sources of pollution. (5 hrs) Air pollution: Sources of air pollution, Primary and secondary pollutants, Criteria pollutants, Other important air pollutants- Volatile Organic compounds, Peroxyacetyl Nitrate, Polycyclic aromatic hydrocarbons and Persistent organic pollutants, Indoor air pollution, health impacts of air pollutants, National Ambient Air Quality Standards. Water pollution: Sources of water pollution, River, lake and marine pollution, groundwater pollution, Water quality parameters and standards, health impacts of water pollution on human and aquatic life. Soil pollution and solid waste: Soil pollutants and their sources, Solid and hazardous waste, Impact on human health. Noise pollution: Definition of noise, measurement and sources of noise pollution, Noise standards, impacts of noise on human health. Thermal and Radioactive pollution: Sources and impact on human health and ecosystems.

Unit 6: Climate Change: Impacts, Adaptation and Mitigation

Structure of atmosphere, Importance of 1.5 °C and 2.0 °C limits to global warming, Climate change projections for the Indian sub-continent. Impacts of climate change on ocean, land, forests and natural ecosystems, Impacts on animal species, agriculture, health, urban infrastructure; concept of vulnerability, Adaptation vs. resilience, Indigenous knowledge for adaptation to climate change. Mitigation measures: Green House Gas (GHG) reduction vs. sink enhancement, carbon neutrality, Net zero targets for the future, Energy efficiency measures, National climate action plan.

Unit 7: Environmental Management

Introduction to environmental laws and regulation: Constitutional provisions- Article 48A, Article 51A (g); Introduction to environmental legislations on the forest, wildlife and pollution control. Environmental management system: ISO 14001. Environmental audit and impact assessment, Pollution control and management, Waste Management- Concept of 3R (Reduce, Recycle and Reuse) and sustainability, Ecolabeling /Ecomark scheme.

Unit 8: Environmental Treaties and Legislation

Vienna Convention; Montreal Protocol and the Kigali Amendment. Basel Convention, Stockholm Convention on Persistent Organic Pollutants, Minamata Convention. United Nations Framework Convention on Climate Change

(UNFCCC), Kyoto Protocol, Paris Agreement, India's status as a party to major conventions. National Green Tribunal, Convention on Biological Diversity (CBD), Cartagena Protocol, Nagoya Protocol, Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), Ramsar Convention on Wetlands of International Importance, Ramsar sites, United Nations Convention to Combat Desertification (UNCCD).

Textbooks & References:

1. Barrow, C. J. (1999). Environmental management: Principles and practice. Routledge.
2. Berrang-Ford, L., J.D. Ford & J. Paterson (2011). Are we adapting to climate change? Global Environmental Change-Human and Policy Dimensions 21: 25-33.
3. Chiras, D. D and Reganold, J. P. (2010). Natural Resource Conservation: Management for a Sustainable Future. 10th edition, Upper Saddle River, N. J. Benjamin/Cummins/Pearson.
4. De Anil, K. (2003). Environmental chemistry. New Age International.
5. Gilbert M. Masters and W. P. (2008). An Introduction to Environmental Engineering and Science, Publisher (Pearson)
6. India Code - Digital repository of all Central and State Acts: <https://www.indiacode.nic.in/>
7. KanchiKohli and Manju Menon (2021) Development of Environment Laws in India, Cambridge University Press.
8. Kaushik, A., & Kaushik, C. P. (2006). Perspectives in environmental studies. New Age International.
9. Krishnamurthy, K.V. (2003) Textbook of Biodiversity, Science Publishers, Plymouth, UK
10. Rajagopalan, R. (2011). Environmental Studies: From Crisis to Cure. India: Oxford University Press.
11. Ela Richard A. Marcantonio, Marc Lame (2022). Environmental Management: Concepts and Practical Skills. Cambridge University Press.
12. Simmons, I. G. (2008). Global Environmental History: 10,000 BC to AD 2000. Edinburgh University Press.

COMPUTER APPLICATIONS AND DATA VISUALIZATION

AMV-105-V1

No of Credits: 3**Sessional: 40 Marks**

L	T	P	Total
3	-	-	3

Theory: 60 Marks**Total: 100 Marks****Course Objectives:**

The objective of this course is to provide fundamental knowledge of computer applications, digital tools, data handling techniques, and data visualization methods required for academic, industrial, and professional applications. The course also aims to develop the ability to organize, analyze, and present data effectively using spreadsheet and visualization tools.

Course Outcomes (COs): At the end of the course, the student shall be able to:

CO1: Understand the fundamentals of computers and various digital applications.

CO2: Use operating systems, internet services, and office productivity tools effectively.

CO3: Perform data organization, analysis, and computations using spreadsheet software.

CO4: Create charts, dashboards, and visual representations of data for effective decision-making.

CO–PO Mapping

Course Outcomes	PO1 (Voc/Tech)	PO2 (Prob. Solving)	PO3 (Tool Usage)	PO4 (Quality / Security)	PO5 (Comm/Team)	PO6 (Ethics)	PO7 (Entre/Mgmt)	PO8 (Lifelong)
CO1	3	2	2	1	1	–	–	1
CO2	3	2	2	1	2	–	–	1
CO3	3	3	2	1	2	–	–	1
CO4	3	3	3	1	3	–	1	2

CO–PSO Mapping

Course Outcomes (COs)	PSO1 (Domain Knowledge and Professional Competency in BFSI)	PSO2 (Application-Based Learning and Industry Exposure)
CO1	2	3
CO2	3	2
CO3	3	3
CO4	3	3

Course Contents:**Unit 1: Fundamentals of Computer Applications**

Introduction to Computers, Characteristics and Applications of Computers, Types and Generations of Computers, Basic Components of Computer System, Input and Output Devices, Memory Units and Storage Devices, CPU and its Functions, Computer Hardware and Software, Operating Systems and their Functions, File and Folder Management, Introduction to Cloud Computing and Digital Technologies.

Unit 2: Internet and Digital Tools

Introduction to Internet and Web Browsers, Search Engines, E-mail and Digital Communication, Video Conferencing Tools, Cloud Storage and File Sharing, Social Media Applications, Digital Payment Systems, Basics of Networking and Wi-Fi, Cyber Safety and Security, Computer Viruses and Antivirus Software, Introduction to Artificial Intelligence and Generative AI Tools.

Unit 3: Spreadsheet Applications and Data Analysis

Introduction to Spreadsheet Software (MS Excel/Google Sheets), Worksheets and Workbooks, Data Entry and Formatting, Cell Referencing, Sorting and Filtering, Conditional Formatting, Mathematical and Statistical Functions, Logical Functions, Lookup Functions, Data Validation, Pivot Tables, Data Analysis and

Summarization, Import and Export of Data.

Unit 4: Data Visualization and Presentation Tools

Principles of Data Visualization, Types of Charts and Graphs, Creation of Bar Charts, Line Charts, Pie Charts, Histograms and Scatter Plots, Dashboards and Reports, Data Interpretation and Decision Making, Introduction to Power BI and Google Looker Studio, Presentation Techniques using MS PowerPoint, SmartArt, Animation and Slide Transitions, Introduction to Google Slides.

Textbooks & Reference:

1. V. Rajaraman, Computer Fundamentals, PHI Learning.
2. P. K. Sinha and Priti Sinha, Computer Fundamentals, BPB Publications.
3. Joan Lambert, Microsoft Excel Step by Step, Microsoft Press.
4. Alexis Leon and Mathews Leon, Fundamentals of Information Technology, Vikas Publishing House.
5. Peter Norton, Introduction to Computers, McGraw-Hill Education.
6. Ramesh Bangia, Learning Computer Fundamentals, MS Office and Internet, Khanna Book Publishing.
7. Wayne Winston, Microsoft Excel Data Analysis and Business Modeling, Microsoft Press.
8. Alberto Cairo, The Truthful Art: Data, Charts, and Maps for Communication, New Riders.
9. Cole Nussbaumer Knaflic, Storytelling with Data: A Data Visualization Guide for Business Professionals, Wiley.
10. NPTEL/SWAYAM Web Courses on Computer Fundamentals, Spreadsheet Applications and Data Visualization.

Suggested Tutorial / Sessional Assignments

1. Identify the components of a computer system and prepare a report on different generations and types of computers.
2. Perform file and folder management operations and study the functions of operating systems.
3. Create and manage documents using cloud storage platforms and study the applications of digital technologies.
4. Conduct web searches using search engines and create professional e-mail accounts with attachments and signatures.
5. Study video conferencing platforms and demonstrate file sharing through cloud-based applications.
6. Prepare a report on cyber security threats, computer viruses and the role of antivirus software.
7. Explore digital payment systems and prepare a case study on safe online transactions.
8. Study the applications of Artificial Intelligence and Generative AI tools in education and industry.
9. Create spreadsheets using MS Excel or Google Sheets and perform formatting, sorting and filtering operations.
10. Apply mathematical, statistical and logical functions for solving practical problems using spreadsheets.