

6. DETAILED SYLLABUS

DISCIPLINE SPECIFIC CORE COURSE – 7

FINANCIAL SERVICES

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
FINANCIAL SERVICES	4	3	1	0	Class XII	Nil

Learning Objective:

This paper equips students with the basic structure of the Financial Services Sector and enables them to make a career in the financial services sector.

Learning Outcomes:

After completion of the course, learners will be able to:

1. Analyse the development in housing finance
2. Understand the regulatory framework in financial services.
3. Understand the concepts of Leasing and Hire Purchase system.
4. Develop understanding of Venture Capital, Insurance and Credit Ratings.
5. Learn about the recent developments in Retail Financing.

UNIT—I: Introduction to Housing finance (12 hours)

Concept of financial services, difference between financial and non-financial services, financial service providers in India, latest development in financial services, Regulatory frameworks related to different financial services like leasing, HP, NBFCs, Insurance Cos, HFCs. Significance of housing finance in economic development, NHB- as a regulator and refiner, modus operandi of HFCs; Securitization - concept, types, process of securitization, securitization in India.

Unit—II: Leasing and Hire Purchase (12 Hours)

Concepts of leasing, types of leasing - financial & operating lease, direct lease and sales & lease back, single investor lease and leveraged lease, Domestic lease and International lease,

advantages and limitations of leasing, legal aspects of leasing, determination of lease rental; lease evaluation- the lessee's angle, determination of breakeven lease rental. Hire-Purchase: concept, mathematics of HP, legal aspects of HP, financial evaluation the hirer's view.

Unit—III: Venture Capital, Insurance and Credit Ratings **(12 Hours)**

Concept, history and evolution of VC, the venture investment process, various steps in venture financing, incubation financing. Concept, classification, principles of insurance, IRDA and different regulatory norms, operation of General Insurance. Health Insurance, Life Insurance. Introduction, types of credit rating, advantages and disadvantages of credit ratings, Credit rating agencies and their methodology, International credit rating practices.

Unit—IV: Retail Finance **(9 Hours)**

Introduction to retail finance, benefits and objective, different models/channels of retail finance, methods of determining profit for retail financer, opportunities and challenges of retail finance, Global retail finance scenario, overview of retail finance in India, customer perception and expectation about retail finance.

Essential/recommended readings

1. Khan, M. Y. (2015). *Financial Services* (8th ed.). Tata Mc Graw Hill Education Private Limited.
2. Pond, K. (2017). *Retail banking*. Global Professional Publishing Ltd.
3. Gupta, N. K., & Chopra, M. (2010). *Financial Markets, Institutions & Services*. Ane Books Pvt Ltd.
4. Sriram, K. (1992). *Hand Book of Leasing, Hire Purchase & Factoring, ICFAI, Hyderabad*.

Suggestive readings

1. Kataria, K., & Rajni. (2017). *Financial Markets, Institutions and Financial Services*. Galgotia Publishing Company.
2. Irani, F. (1994). *Inside Leasing*. Tata McGraw Hill
3. Gurusamy, S. (2017). *Essentials of Financial Services*.
4. *SEBI Guidelines*. Nabhi Publications

DISCIPLINE SPECIFIC CORE COURSE – 8
BUSINESS STATISTICS AND FINANCIAL MATHEMATICS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
Business Statistics and Financial Mathematics	4	2	0	2	NIL	NIL

Learning Objectives:

To familiarize students with various statistical and mathematical data analysis tools that can be used for effective decision making. Emphasis will be on the application of the concepts learned to be employed in various financial and managerial situations.

Learning Outcomes:

After the end of the course, students should be able to:

1. Summarize data sets using descriptive statistics.
2. Explain mathematical formulation and solution to problems related to finance including different methods of interest calculation, future, and present value of money.
3. Analyse the relationship between two variables of various managerial situations.
4. Geometrically interpret Correlation and Regression.
5. Develop managerial decision problems using Probability Density Functions and Cumulative Density Functions.

Unit1: Descriptive Analysis and Mathematics of Finance (9 Hours)

a. Descriptive Analysis

Measures of Central Value - Mean, Median, Mode; Measures of Dispersion - Absolute and Relative: Range, Quartile Deviation, Mean Deviation, Standard Deviation, Coefficient of Variance.

b. Mathematics of Finance

Rates of interest - nominal, effective and their inter-relationships in different compounding situations, compounding a sum using different types of rates, Types of annuities: ordinary, due

and deferred - Discrete and continuous, Perpetuity, Determination of future and present values using different types of rates of interest, Applications relating to a loan, mortgage, sinking fund etc.

Unit2: Correlation and Regression Analysis (8 Hours)

Correlation Analysis - Meaning and significance; Correlation and Causation, Types of Correlation, Methods of studying simple correlation: Scatter diagram, Karl Pearson's coefficient of correlation, Spearman's Rank correlation coefficient.

Regression Analysis - Meaning and significance, Regression vs. Correlation, Simple Regression model: Linear Regression, R-square and MSE in Regression, Geometric interpretation of Regression.

Unit3: Random Variable Analysis (7 Hours)

Probability - Meaning and need, Conditional probability, Bayes' theorem, Random Variable: discrete and continuous; Probability Distribution: Meaning, characteristics (Expectation and variance) of Binomial, Poisson, Exponential and Normal distribution, z-score, Chebyshev and empirical rule, Central limit theorem.

Unit4: Introduction to Estimation and Hypothesis Testing (6 Hours)

Estimation - Point and Interval estimation of population mean, Confidence intervals for the parameters of a normal distribution (one sample only), Hypothesis Testing: Null and Alternate Hypothesis, One Tail and Two tail tests, Level of Significance, Type I and Type II error, Test of hypothesis concerning Mean: z-test & t-test.

Practical component (60 Hours)

Students will perform practical problems based upon the concepts such as descriptive statistics, financial functions, correlation, regression analysis, finding z-score, t-test and z-test on excel & relevant software.

Also a detailed case study showcasing the use of Business statistics in the operations of the company, some practical application of use of statistics in demand estimation in real life business.

Essential Readings:

1. 1.Keller, G. (2022). *Statistics for management and economics*. Cengage Learning.
2. 2.Levin, R. I., & Rubin, D. S. (2021). *Statistics for management*.
3. 3.Stine, R., & Foster, D. (2017). *Statistics for Business: Decision Making and Analysis* (3rd ed.). Pearson.
4. Gupta, S. P. (2012). *Statistical Methods*. Sultan Chand & Sons .

Additional Readings:

1. Vohra, N. D. (latest edition). *Business Statistics*. McGraw Hill Education.
2. Thukral, J. K. (latest edition). *Fundamentals of Business Statistics*. Taxmann.

Note: Latest edition of the readings may be used.

DISCIPLINE SPECIFIC CORE COURSE – 9
FUNDAMENTALS OF INSURANCE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
Fundamentals of Insurance	4	3	1		NIL	NIL

Learning Objectives:

The objective of the course is to make learners understand the concepts of Insurance, basic operations and technical components involved.

Learning Outcomes:

1. Identify the concept and components involved in Insurance.
2. Make learners familiar with practical usage of Insurance and its implications at the time of adversities.

3. Make them understand how digitisation has changed the face of Insurance.

Unit I: Insurance and its function **(9 hours)**

Introduction to Insurance - Growth, Origin and History of Insurance, Purpose and Need, Meaning and Definition of Insurance, Characteristics of Insurance, nature, Benefits of insurance, Functions of Insurance, Societal perspective of Insurance, Economic development and Insurance. Insurance as a social security tool.

Unit II: Principle of Insurance **(12 hours)**

Principles of Insurance, Principle of Utmost good faith (Uberrimae Fidei), Principal of Indemnity, Principle of Contribution, Principle of Mitigation of Loss, Principle of Subrogation, Principle of Proximate Cause, Principle of Insurable Interest. Premium- basic definition and concept of Premium.

Unit III: Risk and Management **(12 hours)**

Risk and Uncertainty- Concepts, causes, degree, classification of risks, and cost, Insurable risk. Psychology and attitude towards risk. Managing risk and uncertainty. Cash flow at risk, risk assessment, risk transfer & mitigation method. Risk management-concept, evolution, purpose, scope, importance and its future. Role of risk management in economic growth. Risk management function. Managerial Aspects- goals, identification, evaluation, risk response, and plan administration.

Unit IV: Insurance contract and its regulatory bodies **(12 hours)**

Insurance Documents and policy terms and conditions, Insurance policy Contract-nature-subject- matter of insurance and subject-matter of contract of insurance, features-as per Contract Act, special features, evidence and documents. Types of insurance contract – Personal, Property, Liability, and Guarantee Insurance, Insurance contract vs. Wagering agreement, Assurance vs. Insurance, Gambling vs. Insurance. Payment of premium. E-insurance policy and Insurance Repositories. KYC norms and anti-money laundering guidelines for insurers. Reinsurance Contract- meaning and purpose. IRDA guidelines related to detection and monitoring of Insurance **Fads**

References:

1. Principles of Insurance (IC-01), Insurance Institute of India, Mumbai.
2. Practice of Life Insurance (IC-02), Insurance Institute of India, Mumbai

3. Practice of General Insurance (IC-11), Insurance Institute of India, Mumbai
4. Corporate Agent (IC-38), Insurance Institute of India, Mumbai

Text Books:

1. C. Arthur Williams, Jr. Peter Young, Michael Smith, Risk Management and Insurance, Tata Mc Graw Hill
2. Gulati Neelam C., Principles of Risk Management and Insurance, Excel Publishing Gupta
3. P.K., Insurance and Risk Management, Himalaya Publishing House.
4. Kakkar D.N. & Srivastava S.N., Insurance & Risk Management, New Age Publication.
5. Scott E. Harrington, Gregory R Niehaus, Risk Management and Insurance, Tata McGraw Hill.