Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSE-4.1: Human Resource Development	4	3	1	0	Pass in Class XII	NIL

Learning Objectives

The course aims to make students understand the various aspects of human resource development and its contribution in the organisation.

Learning outcomes

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

1. Examine the evolution of HRD.
2. Analyse the role of HRD strategies in organisations.
3. Apply and evaluate a learning process starting with training needs, analysis, assessment and evaluation process.
4. Explore the role of training needs of employees.
5. Evaluate the training methods used in industry.

SYLLABUS OF DSE-4.1

Unit 1: Introduction (7 hours)

Human Resource Development (HRD)- concept, components, evolution, need and significance, difference between human resource management and human resource development, Role of HR manager, HRD culture and climate, contemporary issues in HRD.

Unit 2: Strategic Perspectives in HRD (11 hours)

Concept of Strategic HRD, HRD Interventions-Performance Appraisal, Potential Appraisal, Performance Coaching and Feedback, Career Planning, Training, Systems Development,

Rewards, Employee Welfare and Work Life balance, Roles of HR Developer, Physical and Financial Resources for HRD, HR Accounting, HRD Audit.

Unit 3: Learning Technology for HRD (9 hours)

Learning and HRD, Models and Curriculum, Principles of Learning, Individual and Group

Learning, Assessment Centre, Transactional Analysis, Behaviour Modeling and Self Directed Learning, Evaluating the HRD.

Unit 4: Human Resource Training and Development (T&D) (9 hours)

Concept and Importance, Assessing Training Needs, Designing and Evaluating Training & Development Programmes, Role, Responsibilities and challenges to Training Managers.

Unit 5: Training Methods (9 hours)

Training within Industry: On the Job & Off the Job Training, Management Development: Lecture Method, Role Play, In-basket Exercise, Simulation, Vestibule Training, Management Games, Case Study, Programmed Instruction, Sensitivity Training, Strategies of Training Program, Review on T&D Programmes in India.

Exercises:

The learners are required to:
1. Engage themselves in trainer competencies through developing and implementing experiential sessions
2. List the various rewards and employee welfare schemes
3. Assess the ways of self-directed learning
4. Design and evaluate training and development programs.
5. Analyse the case studies to understand various training methods.

Suggested Readings:
- Chabbra, T.N .(2016). *Human Resource Management: Concepts and Issues*. Delhi, India: DhanpatRai and Co. Publications.
- Durai, P. (2016). *Human Resource Management*. Delhi, India: Pearson Education.
- Graig, R. L. & Bittel, L. R. (2012). *Training and Development Hand Book*, Delhi, India: McGraw-Hill .
- ILO. (1975). *Teaching and Training Methods for Management Development Hand Book*. New York, United States: McGraw-Hill.
- Kapur, S. (2009). *Human Resource Development and Training in Practice*. Delhi, India: Beacon Books.
- Mondy, R.W., & Martocchio, J. J. (2016). *Human Resource Management* (14th ed.). London, United Kingdom: Pearson Education Publications.
- Nadler, L. (1980). *Corporate Human Resource Development*. New York, United States: Van Nostrand Reinhold, ASTD.
- Routry, P., & Kalyani, M. (2009). *Human Resource Development and Organisational Effectiveness*. Delhi, India: Excel Books.

- Rao, T.V. (2010). *Human Resource Development*. Delhi, India: Sage Publications.

Note: Suggested readings will be updated by the Department of Commerce and uploaded on the Department's website.

Discipline Specific Elective Course- 4.2 (DSE-4.2): Investment Management

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSE-4.2: Investment Management	4	3	1	0	Pass in Class XII	Pass in Financial Markets and Institutions (DSE 3.2)

Learning Objectives

The course aims to familiarize learners with different aspects of investment management and risks, introduce them to the framework of securities analysis and valuation and highlight the process of portfolio management

Learning outcomes

After completion of the course, learners will be able to:
1. Analyze the environment of investment and risk return framework.
2. Describe bonds in terms of valuation, yields, and risks.
3. Analyse equity shares using different approaches and models.
4. Construct, analyse, select and evaluate portfolios along with a deep understanding of capital market theory and associated models.
5. Comprehend and analyse futures and options and to be able to devise own investment strategies using various options trading strategies in the derivative market.

SYLLABUS OF DSE-4.2

Unit 1: Introduction to Investment (9 hours)

Concept of Investment, Investment Decision Process; Avenues for investment- features and classes; Difference between investment, speculation, and gambling; Primary market- IPO, Secondary Markets- Trading of securities; Security market indices; Return and risk: concept, calculation, trade-off between risk and return; Impact of taxes and inflation on investments.

Unit 2: Bond Analysis and Valuation (9 hours)

Bond Fundamentals; Estimating bond yields; Bond Valuation and Malkiel Theorems; Bond risks and credit rating; Present Scenario of Indian Debt Market.

Unit 3: Equity Analysis and Valuation (9 hours)

Fundamental Analysis; Technical Analysis and Efficient Market Hypothesis; Valuation of Equity Shares using Dividend Discount Model and P/E Ratio model.

Unit 4: Portfolio Management (9 hours)

Portfolio Management- Concept and need, Measurement of Portfolio Return and risk; Diversification- Markowitz Theory; Capital Asset Pricing Model.

Unit 5: Mutual Fund and Derivatives (9 hours)

Mutual Fund -concept and types; Performance Evaluation; Overview of Financial Derivatives-Forwards, Futures and Options.

Exercises:
The learners are required to:
1. Extract historical data on daily/monthly/annual prices for stocks in an index from a financial database. Evaluate them in terms of risk and return using appropriate software.
2. Estimate the Yield-to-Maturity of a corporate bond using relevant software.
3. Carry out moving average analysis on a stock of a real company to decide whether to buy, sell or hold the stock for one month using spreadsheets. Further, learners are also required to assess their decision after one month of decision making.
4. Select any 5 companies of your choice. Using appropriate models, forecast their future cash flows, growth rate and cost of capital. Estimate the intrinsic value of stocks of these companies using relevant software.
5. Select any 5 stocks of your choice. Extract past data on their prices and volumes from a financial database. Make investment decisions using appropriate technical analysis tools and techniques. Use any technical analysis software for this purpose.
6. Construct portfolios based on any firm attribute using past data on NSE 500 stocks. Assess the profitability of this investment strategy. Evaluate if the returns on this strategy are explained by standard risk models such as CAPM. Use relevant software for your estimations.
7. Build and analyse option strategies for Index and Stock options using any option building analytical tool.

Suggested Readings:

- Alexander G. J., Sharpe W.F., & Bailey J.V. (2009). *Fundamentals of Investments*. Delhi, India: PHI Learning
- Bodie, Z., Kane, A., Marcus A.J. ,& Mohanty, P.(2020).*Investments*. New York, United States: McGraw Hill.
- Chandra, P.(2021).*Investment Analysis & Portfolio Management.* Delhi, India: Tata McGraw Hill Education
- Jones, C.P. (2019). *Investment Analysis and Management*. New Jersey, United States:Wiley.
- Kevin, S.(2015).*Security Analysis and Portfolio Management*. Delhi, India: PHI Learning
- Mayo. (2016). *An Introduction to Investment*. Boston, United States: Cengage Learning.
- Pandian, P.(2012).*Security Analysis and Portfolio Management*. Delhi, India: Vikas Publishing House.
- Ranganatham, M., & Madhumati, R. (2011). *Security Analysis and Portfolio Management*. Delhi, India: Pearson (India) Education.
- Rustagi, R.P.(2023). *Investment Management*. Delhi, India: Sultan Chand.
- Sharma S.K., & Kaur G. (2019). *Fundamentals of Investment*. Mumbai, India:Sultan Chand Publishers
- Singh,Y.P. (2000). *Fundamentals of Investment Management*. Delhi, India: Galgotia Publications
- Tripathi,V. (2019). *Fundamentals of Investment*. Delhi, India: Taxmann Publications.

Note: Suggested readings will be updated by the Department of Commerce and uploaded on the Department's website.

> ### Discipline Specific Elective Course- 4.3 (DSE-4.3): Sustainability Marketing

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSE 4.3- Sustainability Marketing	4	3	1	0	Pass in Class XII	NIL

Learning Objectives

This course aims to familiarize the students with the concept and process of sustainable marketing.

Learning outcomes

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

1. Describe the need of sustainable marketing in view of environmental, legal and ethical aspects.
2. Explore the opportunities for sustainable marketing strategies.
3. Identify the consumer behaviour for sustainable marketing.
4. Demonstrate how sustainable marketing can be applied in marketing mix strategies.
5. Discover the case studies of legal framework for sustainable marketing.

SYLLABUS OF DSE-4.3

Unit 1: Introduction (9 hours)

Sustainability- Concept, Issues, SDG Goals. Sustainability Marketing- Concept, Rationale, Evolution, Pillars of Sustainability Marketing, Linkage with SDGs.

Sustainability and Ethical Decision Making. Challenges of Practising SM- Sustainability and Profitability. Triple Bottom Line- An Overview.

Unit 2: Sustainability Marketing Opportunities (9 hours)

Sustainability Opportunities- Marketing Environment; Segmentation, Targeting and Positioning; Creating Value through Sustainability- Designing the Marketing Mix, Holistic Approach to Sustainability.

Unit 3: Consumer Behaviour and Sustainability Marketing (9 hours)

Unsustainable Lifestyles, Dimensions of Sustainable Consumer Behaviour. Motives of adapting Sustainable Consumer Behaviour, Attitude-Behaviour Inconsistency in Sustainable Buying Decisions, Environmental Consciousness; Sustainable Consumption- Beliefs, Social Norms, Values, Cases of Mindful Consumption and Responsible Consumption.

Unit 4: Sustainability and Marketing Mix Decisions (9 hours)

Developing and Reinforcing Behaviour through 3 R's- Recycle, Reuse and Reduce.

Sustainable Products, Sustainable Branding and Packaging. Sustainable Pricing Decisions, Sustainable Marketing Communication, Sustainability and Promotion Mix Decision, Marketing Channels and Sustainable Supply Chain.

Unit 5: Sustainability Legal Framework and its Implementation in India (9 hours)

An Overview of Legal Framework- Leading Cases and Developments. Role of Sustainable Marketing in Global Network.

Exercises:

The learners are required to:

1. Perform a role play (as a marketer and as consumers)
2. Make presentations of companies' case examples where marketers have adapted sustainable marketing mix strategies and how it impacted their business.
3. Represent their own Behaviour for mindful and responsible Behaviour.
4. Demonstrate how marketers can develop and reinforce consumer Behaviour through 3 R's.
5. Find out the leading case studies where sustainable marketing has emerged as an important issue.

Suggested Readings:

- Kotler, P.. (2012). *Rethinking Marketing: Sustainable Marketing Enterprise in Asia, Second Edition*. Delhi, India: Pearson.
- Belz, F.M., & Ken, P. (2012). *Sustainability Marketing: A Global Perspective*. Delhi, India: Willey publication
- Richardson, N. (2020). *Sustainable Marketing Planning*. Delhi, India: Routledge, Taylor and Francis Group.
- Peterson, M. (2021). *Sustainable Marketing: A holistic Approach*. Delhi, India: Sage Publication Ltd.
- Carvill,M., Butler, G., & Evans, G. (2021). *Sustainable Marketing: How to Drive Profits with Purpose*. United Kingdom: Bloomsbury Business.
- Fuller, D.A. (1999). *Sustainable Marketing: Managerial-Ecological Issues. Markets and Market Development*. United Kingdom: Sage Publications Inc.

Additional Resources:

- https://moef.gov.in/wp-content/uploads/wssd/doc2/ch2.html
- https://www.oecd.org/env/outreach/37838061.pdf
- http://www.sacep.org/pdf/Reports-Technical/2002-UNEP-SACEP-Law-Handbook-India.pdf
- https://open.umn.edu/opentextbooks/textbooks?term=sustainable+development&commit=Go

Note: Suggested readings will be updated by the Department of Commerce and uploaded on the Department's website.

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSE 4.4- Analysis of Financial Statements	4	3	1	0	Pass in Class XII	Pass in Financial Reporting Analysis & Valuation (DSE3.4)

Learning Objectives

The course aims to help the learners to analyse accounting and other information incorporated in the corporate annual reports, and to analyse the operating, financial, and structural performance of business firms with the help of appropriate analytical tools.

Learning outcomes

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

1. Analyse and interpret the quantitative information provided in the Financial Statements of a company.
2. Examine various techniques for financial statement analysis.
3. Analyze financial statements and make inter-firm comparisons using Accounting ratios.
4. Prepare a cash flow statement and perform cash flow analysis.
5. Analyse intra-firm and inter-firm comparisons using case study technique.

SYLLABUS OF DSE-4.4

Unit 1: Introduction (4 hours)

Introduction to Corporate Financial Statements, Financial/Accounting information contained in the Financial Statements; Meaning, objectives, and limitations of Financial Statement Analysis; Considerations for the economic and financial analysis.

Unit 2: Techniques of Financial Statement Analysis - I (7 hours)

Techniques of financial statement analysis – Comparative Financial Statements, Common-size Financial Statement, and Trend Analysis.

Unit 3: Techniques of Financial Statement Analysis - II (11 hours)

Meaning, objectives, and classification of Accounting Ratios and Ratio Analysis; Computation and application of accounting ratios for evaluation of performance (Activity and Profitability Analysis), evaluation of financial health (Liquidity, Solvency, and Structural Analysis); and market ratios. EVA analysis. Intra-firm and inter-firm comparison using ratio analysis. DuPont analysis.

Unit 4: Cash Flow Analysis (9 hours)

Meaning of Cash Flow; Objectives and Importance of Statement of Cash Flows; Preparation of Statement of Cash Flows as per AS 3 and Ind AS 7.

Unit 5:Analysis of Financial Statements- Case Study (14 hours)

A Case Study Intra-firm and inter-firm comparison of any three listed companies from any sector/industry for a period of five years using the spreadsheet, Industry Averages, Growth rates, CAGR, Z-score etc. using the techniques of financial statement analysis.

Exercises:

Learners are required to:

1. Extract historical annual reports of any reputed company.
2. Analyse the information contained in the financial statements using common size analysis and trend analysis.
3. From the financial statements, compute the accounting ratios to examine the operating efficiency, profitability, liquidity, and solvency of the company.
4. Prepare Cash flow statements from the information available in the financial statements.
5. Conduct a comparative analysis of any two listed companies using excel.

Suggested Readings:

● Ahuja, N. L., &Dawar, V. (2015). *Financial Accounting and Analysis*. Delhi, India: Taxmann Publications.
● Bhattacharyya, A.K. (2016). *Financial Accounting for Business Managers*. Delhi, India: Prentice Hall of India.
● Friedson, M. S., & Alvarez, F. (2022). *Financial Statement Analysis: A practioners' Guide*. New Jersey, United States: Wiley.
● Foster, G. (1986). *Financial Statement Analysis*. London, United Kingdom: Pearson Education.
● Gopalkrishnan, A. A. (2001). *Understanding Financial Statements - Interpretation and Analysis*. Delhi, India: Label Book Publisher.
● Goyal, B.K. (2022). *Corporate Accounting*. Delhi, India: Taxmann Publications.

- Gupta, A. (2018). *Financial Accounting for Managers: An Analytical Perspective*. Delhi, India: Pearson Education.
- Gupta, M., Kaur, H., & Gupta, R. (2020). *Financial Reporting and Analysis*. Delhi, India: JSR Publishing House LLP.
- Helfert, E. A. (1996). *Techniques of Financial Analysis: A Practical Guide to Measuring Business Performance*. New York, United States: McGraw Hill Education.
- Lal, J. & Sucheta, G. (2018). *Financial Reporting and Analysis*. Mumbai, India: Himalaya Publishing House.
- Narasimhan, M. S. (2016). *Financial Statement and Analysis*. Uttar Pradesh, India: Cengage Learning India.
- Sah, R. K. (2019). *Concept Building Approach to Corporate Accounting*. Uttar Pradesh, India: Cengage Learning India.
- Soffer, L. C., & Soffer, R. J. (2002). *Financial Statement Analysis: A Valuation Approach*. London, United Kingdom: Pearson Education.
- Myer, J. N. (1969). *Financial Statement Analysis*. Prentice-Hall.
- Tulsian, P. C., & Tulsian, B.(2016). *Corporate Accounting*. Delhi, India: S. Chand Publishing.
- Tulsian, P. C., & Tulsian, B.(2017). *Financial Management*. Delhi, India: S. Chand Publishing.

Note: Suggested readings will be updated by the Department of Commerce and uploaded on the Department's website.

> ## Discipline Specific Elective Course- 4.5 (DSE-4.5): Decision Science

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSE 4.5 – Decision Science	4	3	1	0	Pass in Class XII	NIL

Learning Objectives

The course aims to familiarise the learners with basic mathematical tools, emphasising applications to business and economic situations.

Learning outcomes

After completion of the course, learners will be able to:
1. Analyse quantitative techniques that play an important role in managerial decision-making.
2. Compare programming for business problems involving constrained optimization.
3. Examine, schedule, and coordinate the activities of a large-scale project using PERT and CPM.
4. Describe programming to assign sources and jobs to destinations and machines.
5. Examine how competitive choices in a business are made and how the business strategies are developed to reduce the customers' wait time.

SYLLABUS OF DSE – 4.5

Unit 1: Linear Programming (9 hours)
Formulation of Linear programming problems (LPPs) with more than two variables. Solution of LPPs by simplex method - maximization and minimization cases. The dual problem: Formulation, the relationship between Primal and Dual LPP, Primal and Dual solutions (excluding mixed constraints LPPs). The economic interpretation of the dual.

Unit 2: Assignment and Transportation (9 hours)
Assignment Problem, Hungarian Method of Assignment, Unbalanced Assignment Problems, Transportation Problem, Method to find the initial solution: North-west corner method, Least cost Method, Vogel's approximation method, Finding optimal solution: Stepping-stone method and Modified Distribution Method.

Unit 3: Sequencing and Game Theory (9 hours)
Introduction of sequencing, Notations, Terminology, and Assumptions, Processing n jobs through two and three machines, Introduction of Game Theory, Two-Person Zero-Sum Game, Pure Strategies (Minimax and Maximin Principles): Game with a saddle point. Mixed Strategies, Rule of Dominance.

Unit 4: Queuing Model and Replacement Theory (9 hours)
Introduction of Queuing Model, Structure of a Queuing System, Performance Measure of a Queuing System, Model I: {(M/M/1): (Infinite/FCFS)}, Introduction of Replacement, Replacement of items whose efficiency deteriorates with time.

Unit 5: Project Management: PERT and CPM (9 hours)
Introduction, Basic Difference PERT and CPM, Phases of Project Management, PERT/CPM Network Components and Precedence Relationships, Critical Path Analysis, Critical Path, Project Scheduling with uncertain activity times, Estimation of project completion time.

Exercises:

The learners are required to:
1. Identify the decision-making variables and assess their functional relationship with other variables affecting the decision in a business situation.

2. Establish the production sequence of a hypothetical manufacturing company.

3.Solve business problems as an application of linear programming/assignment/ transportation.

4. Estimate the time when an asset of a company should be replaced.

5. Use a hypothetical case of a project and plan, schedule, and coordinate the activities.

Note: Learners may use software packages.

Suggested Readings:

- Anthony, M., & Biggs, N. (1996). *Mathematics for Economics and Finance*. Cambridge, United Kingdom: Cambridge University Press.
- Budnick, P. (1986). *Applied Mathematics for Business, Economics, & Social Sciences*. New York, United States: McGraw Hill Publishing.
- Dowling, E. (2011). *Introduction to Mathematical Economics*. New York, United States: McGraw Hill Publishing.
- Hamdy, A. T. (2017). *Operational Research*. Pearson.
- Kapoor, V.K. (2013). *Operations Research: Quantitative Techniques for Management*. Delhi, India: Sultan Chand and Sons.
- Levin R. I., Rubin D.S., Stinson J.P., & Gardner E.S. Jr. (1986). *Quantitative Approaches to Management*. New York, United States: McGraw Hill International Editions.
- Vohra, N.D. & Arora, H. (2010). *Quantitative Techniques in Management*. Delhi, India: McGraw Hill.
- Tulsian, P.C. & Pandey, V. (2002). *Quantitative Techniques: Theory and Problems*. India: Pearson Education.

Note: Suggested readings will be updated by the Department of Commerce and uploaded on Department's website.