UNIVERSITY OF DELHI

CNC-II/093/1(25)/2023-24/69

Dated: 29.05.2023

N O T I F I C A T I O N

Sub: Amendment to Ordinance V

[E.C Resolution No. 60/ (60-1-2) dated 03.02.2023]

Following addition be made to Appendix-II-A to the Ordinance V (2-A) of the Ordinances of the University;

Add the following:

Syllabi of Semester-III of the Department of Commerce under Faculty of Commerce & Business Studies based on Under Graduate Curriculum Framework -2022 implemented from the Academic Year 2022-23.

B.COM. (HONS.)

Discipline Specific Course- 3.1(DSC-3.1): Business 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		
DSC -3.1: Business Mathematics	4	3	0	1	Pass in XII	NIL

Learning Objectives

The course aims to familiarize the learners with the basic mathematical tools with special emphasis on applications to business and economic situations.

Learning outcomes

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

1. Assess the applicability of matrices as mathematical tools in representing a system of equations.
2. Apply differential calculus to solve simple business problems.
3. Evaluate business problems involving complex linear relationships between decision variables and their determining factors.
4. Explain mathematical formulation and solution of problems related to finance including different methods of interest calculation, future and present value of money.
5. Develop programming for business problems involving constrained optimisation.

SYLLABUS OF DSC-3.1

Unit 1: Matrices and Determinants (9 hours)

Overview of Matrices. Solution of a system of linear equations (having a unique solution and involving not more than three variables) using matrix inversion method and Cramer's Rule

Leontief Input Output Model (Open Model Only).

Unit 2: Calculus-I (6 hours)

Concepts and rules of differentiation. Concept of Marginal Analysis: Marginal Revenue, Marginal Cost. Concept of Elasticity of demand and supply.
Application of Maxima and Minima problems: Revenue, Cost, Profit, Economic Order Quantity, Optimal trade in time.

Unit 3: Calculus-II (12 hours)

Partial Differentiation: Partial derivatives up to second order. Homogeneity of a function and Euler's theorem. Production Function: Returns to factor, Returns to scale. MRTS and Elasticity of Substitution.

Application of Maxima and Minima problems involving two independent variables.

Integration: Nature of commodities and partial elasticity of demand, Applications of marginal analysis, Consumer Surplus and Producer Surplus.

Unit 4: Mathematics of Finance (9 hours)

Rates of interest: nominal, effective and their inter-relationships in different compounding situations.

Compounding a sum using different types of rates. Applications relating to Depreciation of assets and average due date.

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 Capital Expenditure and Leasing.

Unit 5: Linear Programming (9 hours)

Formulation and Assumptions of LPP, Solution by Simplex Method- maximization and minimization cases. Shadow prices of the resources. Special Cases: Identification of unique and multiple optimal solutions, unbounded solution, infeasibility and degeneracy.

Practical Exercises: 30 hours

The learners are required to:

1. Assess the use of matrices in evaluating competing alternatives.
2. Apply differential calculus to solve hypothetical business problems.
3. Evaluate business problems as an application of linear programming.
4. Gather information about various deposit and loan schemes of banks to find out interest rate differentials, and compounded value.
5. Gather information about annuity schemes in the investment markets like periodic home mortgage payments, insurance payments and pension payments, life insurance products as an annuity.
6. Identify the decision-making variables and assess their functional relationship with other variables affecting the decision in a hypothetical business and economic situation.
7. Develop programming for hypothetical business problems involving constrained optimisation.

Suggested Readings:

- Anthony, M., & Biggs, N. (1996). *Mathematics for Economics and Finance*. Cambridge: Cambridge University Press.
- Ayres, F. J. (1963). *Theory and Problems of Mathematics of Finance*. New York: McGraw Hill Publishing.
- Budnick, P. (1986). *Applied Mathematics for Business, Economics, & Social Sciences*. New York: McGraw Hill Publishing.
- Dowling, E. (2011). *Introduction to Mathematical Economics*. New York: McGraw Hill Publishing Kapoor.
- Ghosh & Sinha (2018). *Business Mathematics and Statistics*. Oxford University Press.
- S.K. Sharma and Kaur, G. (2019). *Business Mathematics*. New Delhi: Sultan Chand & Sons (P) Ltd.
- Singh, J. K. (2017). *Business Mathematics*. New Delhi: Himalaya Publishing House.
- Thukral, J. K. (2009). *Mathematics For Business Studies*. New Delhi: Mayur Paperbacks.
- V. K., & Sancheti, D. C. (2014). *Business Mathematics, Theory & Applications*. Delhi: S. Chand Publishing.

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

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

Discipline Specific Course- 3.2(DSC-3.2): Financial Management

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		
DSC-3.2: Financial Management	**4**	**3**	**0**	**1**	**Pass in XII**	**NIL**

Learning Objectives

The course aims to enable students to acquire knowledge of principles and practice of financial management.

Learning outcomes

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

1. Analyse the conceptual framework of financial management and get an insight into the concept of time value of money, and risk and return.
2. Estimate cash flows for projects, and evaluate their profitability using capital budgeting techniques.
3. Estimate the cost of capital; and critically analyse different capital structure theories and factors affecting capital structure decision of a firm.
4. Analyse different theories of dividend and factors affecting dividend policy.
5. Estimate working capital requirements of a firm, and device optimum credit policy for a firm.

SYLLABUS OF DSC-3.2

Unit 1: Financial Management: An Overview (3 hours)

Nature, scope and objectives of financial management. An overview of time value of money and risk and return.

Unit 2: Capital Budgeting Decision (12 hours)

The Capital Budgeting Process, Cash Flow Estimation, Different techniques of Capital budgeting: Payback Period Method, Discounted Payback Period Method, Accounting Rate of Return, Net Present Value (NPV), Internal Rate of Return (IRR) and Profitability Index.

Unit 3: Cost of Capital and Financing Decision (15 hours)

Cost of Capital: Estimation of components of cost of capital: Method for calculating cost of equity, Cost of retained Earnings, Cost of Debt, Cost of Preference Capital, Weighted Average Cost of Capital (WACC) and Incremental (Marginal) Cost of Capital.

Capital Structure: Theories of Capital Structure (Net Income, Net Operating Income, MM Hypothesis, Traditional Approach). Operating, Financial and Combined Leverage. EBIT-EPS Analysis. Determinants of Capital Structure.

Unit 4: Dividend Decision (6 hours)

Theories for relevance and irrelevance of dividend decision for corporate valuation- MM Approach, Walter's Model, Gordon's Model. Determinants of Dividend policy.

Unit 5: Working Capital Decision (9 hours)

Concepts of Working Capital, Operating & Cash Cycles, Risk-return Trade off, working capital estimation, Receivables Management.

Note: Use of Spreadsheet should be encouraged for doing basic calculations for various topics in the course and giving students subject related assignments for their internal assessment purposes.

Practical Exercises **30 hours**

The learners are required to:

1. Compute risk and return of various investment alternatives using excel spreadsheet. 2. Estimate cash flows for a hypothetical Start-up. Using excel, evaluate the project's profitability by employing capital budgeting evaluation techniques.
2. Extract data from financial statements of different firms/financial databases and estimate the cost of capital using appropriate software.
3. Extract historical data and evaluate different dividend policies followed by companies of specific industries.
4. Estimate working capital requirements for any two companies belonging to different industries and compare them.

Suggested Readings:

- Brealey, R.A., Myers S.C., Allen F., & Mohanty P. (2020). *Principles of Corporate Finance*. McGraw Hills Education.
- Khan, M.Y. & Jain, P.K. (2011). *Financial Management: Text, Problems and Cases*. New Delhi: Tata McGraw Hills.
- Kothari, R. (2016). *Financial Management: A Contemporary Approach*. New Delhi: Sage Publications Pvt. Ltd.
- Maheshwari, S. N. (2019). *Elements of Financial Management.* Delhi: Sultan Chand & Sons.
- Maheshwari, S. N. (2019). *Financial Management – Principles & Practice.* Delhi: Sultan Chand & Sons.
- Pandey, I. M. (2022). *Essentials of Financial Management.* Pearson.

- Rustagi, R.P. (2022). *Fundamentals of Financial Management.* New Delhi: Taxmann. New Delhi.
- Sharma, S.K. & Sareen, R. (2019). *Fundamentals of Financial Management*. New Delhi: Sultan Chand & Sons (P) Ltd.
- Singh, J.K. (2016). *Financial Management: Theory and Practice.* New Delhi: Galgotia Publishing House.
- Singh, S. and Kaur, R. (2020). *Fundamentals of Financial Management.* New Delhi: SCHOLAR Tech Press.
- Tulsian, P.C. & Tulsian, B. (2017). *Financial Management*. New Delhi: S. Chand.

Additional Resources:

- Chandra, P. (2019). *Financial Management: Theory and Practice*. New Delhi: Tata McGraw Hills.
- Ross, S. A., Westerfield, R. & Jefferey, J. (2017). *Corporate Finance*. Tata McGraw Hills.
- Srivastava, R. and Mishra, A. (2011). *Financial Management.* U.K.: Oxford University Press.
- Van Horne, J. C, & John, W. (2008). *Fundamentals of Financial Management*. Pearson Education.

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

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

Discipline Specific Course- 3.3(DSC-3.3): Principles of Marketing

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		
DSC 3.3 – Principles of Marketing	**4**	**3**	**1**	**0**	**Pass in XII**	**NIL**

Learning Objectives

The objective of this course is to provide basic knowledge of concepts, principles, tools and techniques of marketing and to

provide knowledge about various developments in the marketing.

Learning outcomes

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

1. Discuss basic concepts of marketing, marketing philosophies and environmental conditions affecting marketing decisions of a firm.
2. Describe the dynamics of consumer Behaviour and process of market selection through STP.
3. Analyse the process of value creation through marketing decisions involving product development.
4. Analyse the process of value creation through marketing decisions involving product pricing and its distribution.
5. Explore marketing decisions involving product promotion, and draft promotion mix strategies.

SYLLABUS OF DSC-3.3

Unit 1: Introduction to Marketing and Marketing Environment (9 hours)

Introduction to Marketing: Scope and Importance; Core concepts of marketing; Marketing Philosophies; Services Marketing, Marketing Mix.
Marketing Environment: Need for studying marketing environment; Micro environmental factors- company, suppliers, marketing intermediaries, customers, competitors, publics; Macro environmental factors – demographic, economic, natural, technological, politico-legal and socio- cultural.

Unit 2: Consumer Behaviour and Market Selection (9 hours)

Consumer Behaviour: Need for studying consumer Behaviour; Stages in Consumer buying decision process; Factors influencing consumer buying decisions.

Market Selection: Choosing market value through STP. Market Segmentation- bases of segmenting consumer markets. Market Targeting, Product Positioning – concept and bases

Unit 3: Product Decisions and New Product Development (9 hours)

Product Decisions: Concept and classification; Levels of Product. Designing value: Product- mix, Branding- types, significance, and qualities of good brand name; Packaging and Labelling- types and functions; Product support services.

New Product Development: New product development process; Product life cycle – concept and marketing strategies.

Unit 4: Pricing Decisions and Distribution Decisions (9 hours)

Pricing Decisions: Objectives, Factors affecting price of a product, Pricing methods, Pricing strategies.

Distribution Decisions: Delivering Value: Channels of distribution- types and functions; Wholesaling and retailing; Factors affecting choice of distribution channel; Logistics decisions.

Unit 5: Promotion Decisions and Developments in Marketing (9 hours)

Promotion Decisions: Communicating Value: Communication process; Importance of Promotion. Promotion-mix tools advertising, personal selling, sales promotion, public relations, publicity and direct marketing; Integrated Marketing Communication.
Developments in Marketing: Sustainable Marketing- concept and issues. Rural marketing- characteristics and rural marketing mix. Social marketing- concept and issues. Digital marketing- concepts and tools.

Exercises:

The learners are required to:

1. Analyse the marketing environment of any firm of your choice.
2. Prepare a marketing mix for a product of your choice to be targeted to a rural market.
3. Select any product and analyse its segmentation strategy in comparison to its immediate competitive product.
4. Examine the marketing strategies followed by companies to prolong the maturity stage and defer its decline.
5. Suggest an appropriate distribution strategy of a product of your choice.
6. Draft promotion mix strategy for a hypothetical e-commerce firm.

Suggested Readings:

● Baines Et. AL. (2021). Fundamentals of Marketing. Oxford University Press.
● Etzel, M. J., Walker, B. J., Stanton, W. J., Pandit, A. (2010). Marketing. Mc Graw Hill.
● Jain, P & Singhal, N. (2021). Principles of Marketing. Scholar Tech Press, Delhi.
● Kapoor, N. (2021). Principles of Marketing. Prentice Hall of India.
● Kotler, P., Armstrong, G., Agnihotri, P. (2018). Principles of Marketing. Pearson Education. Indian edition.
● Kotler, P., Chernev, A., Keller, K. L. (2022). Marketing Management. United Kingdom: Pearson Education.
● Levy, M., Grewal, D. (2022). Marketing. United States: McGraw-Hill Education.
● Mamoria C.B., Bhatacahrya A.(2021). Marketing Management. Delhi: Kitab Mahal.
● Sharma, K., Aggarwal S. (2021). Principles of Marketing. Delhi: Taxmann Publications.

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