St. Xavier's University, Kolkata
Xavier Business School

Semester I (Executive MBA)

MANAGERIAL ECONOMICS (MBE1010T)
Full Marks: 100 Credit 4

Unit 1: Economic Concepts

Basic demand & Supply analysis- Determinants of demand & supply, Individual versus market demand curve. Concept of equilibrium and comparative static analysis. Concept and application of elasticity (Price, Cross and income elasticity), Consumer Surplus, Producer surplus and efficiency of markets.

Unit 2: Consumer Behaviour Analysis

The consumption decision: Concept of Budget constraint, Utility and Marginal Utility. Consumption and income/price changes. Properties of indifference curves; consumer's optimum choice; income and substitution effects; labour supply and savings decision - Choice between leisure and labour.

Unit 3: The Production behavior of a Firm

Concept of PPF and trade off. Concept of short run and long run production function. Definition of economies of scale and scope. Concept of Isoquant & Isocost and economic region of production. The learning curve. Make vs. buy decision – Vertical chain of production – Reasons for outsourcing: Benefits and costs of using the market.

Unit 4: Market and Competitive Analysis

Competition identification and market definition – Measures of market structure. Behaviour of profit maximizing firms and the production process; short run costs and output decisions; costs and output in the long run. Different forms of market: structural features and price –

output decision – Oligopoly: Cournot of quantity competition; Games in matrix form and Nash equilibrium, Price and non-price competition, cartel cheating and cooperation.

Unit 5: National Income Accounting

Production of output, Payments of factor of productions, measuring GDP, GNP, NNP, personal income and disposable income. Concept of Inflation, GDP deflator. Trend of Indian economic GDP, unemployment and inflation rate from the post liberalizing era.

Unit 6: Open Economy Macroeconomics

IS-LM Framework, Goods market IS Curve, Money market LM curve, equilibrium, monetary and fiscal policies in open markets.

Unit 7: Case Studies

Suggested Readings:

1. Hal. R. Varian: Intermediate Microeconomics/ Microeconomic analysis
2. Pindyck and Rubinfeld: Microeconomics (Pearson Education)
3. Anindya Sen: Microeconomics (Oxford) (11)
4. Mankiw, N.G: Macroeconomics (Words Publishing)
5. Ferguson & Gould's Microeconomics Theory (AITBS Publishers)
6. A. Koutsoyiannis: Modern Microeconomics.

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Semester I (Executive MBA)

MANAGERIAL ACCOUNTING (MBE1020T)

Full Marks: 100 Credit 4

UNIT-I: Introduction to Accounting

Introduction and definition – Book-keeping and Accounting – Objectives of Financial Accounting – Accounting Cycle – Users of Accounting – Branches of Accounting – Accounting Concepts and conventions – Systems – Rules – Accounting Equation Approach –Journal – Ledger – Trial Balance – Capital and Revenue Expenditure – Deferred Revenue Expenditure – Capital and Revenue Receipts – Final Accounts – Accounting Standards – Utility of Accounting Standards – Indian Accounting Standards (Ind ASs)– Presentation of Financial Statements (Ind AS 1) – Valuation of Inventories (Ind AS 2).

UNIT-II: Accounting for Fixed Assets

Meaning and Causes of Depreciation – Necessity of providing for Depreciation – Objective of providing Depreciation – Factors in calculating Depreciation – Methods for providing Depreciation – Straight Line Method – Written Down Value Method.

UNIT-III: Basics of Financial Statement Analysis

Meaning – Types of Financial Analysis – Techniques of Financial Analysis – Common-Size Analysis – Comparative Analysis – Trend Analysis – Ratio Analysis – Profitability Ratios – Liquidity Ratios – Long-term Debt and Solvency Ratios – Activity Ratios – Market Ratios (for the Investor) – Uses and Limitations of Ratio Analysis.

UNIT-IV: Cost Concepts and Classifications

Concept of Cost – Classification of Costs – Cost Behavior – Cost vs. Expenses – Expenses excluded from Costs – Costs for Decision-Making and Planning – Cost Accounting – Objectives – Methods of Costing – Techniques of Costing – Cost Unit and Cost Centre – Cost Sheet/Statement of Cost.

UNIT-V: Managerial Decision-Making

Concept of Cost Volume Profit (CVP) – Assumptions – Techniques of CVP Analysis – Contribution Margin – Breakeven Analysis – Profit-Volume (P/V) Analysis – Margin of Safety – Decisions involving Alternative Choices – Determination of Sales Mix – Exploring New Markets – Make or Buy Decisions – Shutdown or Continue Decisions – Role and Importance of CVP Analysis – Limitations.

Suggested Reading*:*

Text Books

1) R. Narayanswamy: Financial Accounting: A Managerial Perspective, PHI Learning.
2) Asish K. Bhattacharya: Essentials of Financial Accounting for Business Managers, PHI Learning.
3) G. Singh, MK. Jain, and R. Gupta: Accounting For Managers, PHI Learning.
4) E. Nooren, P. Brewer, and R.H. Garrison: Managerial Accounting for Managers, McGraw Hill.
5) J. Wild, K. Shaw, and B. Chiappetta: Financial and Managerial Accounting, McGraw Hill.

Reference Books

1) M. Hanif and A. Mukherjee: Financial Accounting (Vol. 1), McGraw Hill.
2) M.C. Shukla, T.S. Grewal, and S.C. Gupta: Advanced Accounts (Vol. 1), S. Chand.
3) P.C. Tulsiyan: Financial Accounting, Pearson.
4) S. Mukherjee and A. Mukherjee: Financial Accounting (Vol. 1), Oxford University Press.
5) J. Wild: Financial Accounting Fundamentals, McGraw Hill.
6) J. Lal: Advanced Management Accounting, S. Chand.
7) S.P. Jain and K.L. Narang: Cost Accounting - Principles and Practice, Kalyani Publisher.
8) C. Horngreen et al. : Introduction to Management Accounting, Pearson.
9) C.H. Gibson: Financial Statement Analysis, Cengage Learning.
10) G.I. White, A.C. Sondhi, and D. Fried: The Analysis and Use of Financial Statments, Wiley.

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Semester I (Executive MBA)

BUSINESS STATISTICS (MBE1030T)
Full Marks: 100 Credit 4

Unit1: Understanding of Data

Types of data: qualitative, quantitative, structured, unstructured, Levels of measurement, Data visualization techniques, identifying patterns using statistical software, Identifying and handling missing data, outlier detection and treatment, dealing with duplicate records, data transformation techniques. Type of Research. Sampling Technique

Unit 2: Descriptive Statistics

Measures of central tendency, Measures of dispersion, Percentiles and quartiles, different theoretical Probability Distributions and its degrees of freedom, Hands-on application of measures of central tendency and dispersion, Real-world interpretation of descriptive statistics.

Unit 3: Statistical Inference

Confidence intervals for population parameters, Margin of error, Null and alternative hypotheses, Type I and Type II errors, One-sample and two-sample hypothesis tests, Chi- square tests, Analysis of Variance, Hands-on hypothesis testing using real data, Business applications of statistical inference.

Unit 4: Regression and Correlation in Business

Correlation analysis for exploring relationships, Scatter plots and heatmaps, Application of simple linear regression analysis in business forecasting, Interpretation of regression coefficients. Univariate –Multivariate Time Series Analysis

Unit5: Case Study

Analyzing real-world business cases, applying statistical techniques to solve practical business problems, presenting insights and recommendations, Presenting findings and recommendations, Peer review and feedback

Suggested Readings:

1. Statistics for Management, 8th Edition, Levin & Rubin
2. Complete Business Statistics, 7th Edition, Amir D. Aczel et al.
3. Statistical Methods, Volume I & Volume II by N.G. Das
4. Statistical Methods, 2011 Edition by S. P. Gupta

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Semester I (Executive MBA)

ORGANIZATIONAL BEHAVIOUR(MBE1040T)
Full Marks: 100 Credit 4

Unit-I: Concept, Nature and Evolution of Management Thought:

Early contributors, Scientific, process, human behaviour and social system school; Decision theory school; Quantitative and system school; Contingency theory of management; Social and Ethical issues in management, Challenges of managing 21st century corporations/organization

Unit-III: Organizational Behaviour:

Organisational behaviour -concept and significance; Relationship between management and organisational behaviour; organizational culture, Attitudes; Perception; Learning; Personality and values; emotions and moods. Motivation: Process of motivation; Theories of motivation - need hierarchy theory, theory X and theory Y, two factor theory, Alderfer's ERG theory, McCleland's learned need theory, Victor Vroom's expectancy theory, Stacy Adams equity theory.

Unit-III: **Leadership: Concept; Leadership styles:**

Theories -trait theory, behavioral theory, Fielder's contingency theory; Harsey and Blanchard's situational theory; Managerial grid; Likert's four systems of leadership, contemporary issues in leadership Group Dynamics and Team Development: Group dynamics -definition and importance, types of groups, group formation, group development, group composition, group performance factors; Principle-centred approach to team development.

Unit-IV: Organizational Conflict and Negotiations:

Dynamics and management; Sources, patterns, levels, and types of conflict; Traditional and modern approaches to conflict; Functional and dysfunctional organizational conflicts; Resolution of conflict. Organizational Development: Concept; Need for change, resistance to change; Theories of planned change; organization change and stress management, Organizational diagnosis.

Case Studies:

Suggested Readings:

1. Organizational Behavior: Texts and Cases; Kavita Singh, Pearson, New Delhi
2. Organization Theory and Behavior; B. P. Singh & T. N. Chhabra, Dhanpat Rai & Co., New Delhi
3. Organizational Behavior; Stephen P. Robbins, Timothy A Judge and Neharika Vohra, Pearson, New Delhi
4. Organizational Behavior: Emerging Knowledge and Practice for the Real World; Steven L McShane, Mary Ann Von Glinow and Radha R Sharma, Tata McGraw-Hill, New Delhi
5. Organizational Behavior: Texts and Cases; Uma Sekharan, Tata McGraw-H8ill, New Delhi

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Semester I (Executive MBA)

OPERATIONAL RESEARCH(MBE1050T)
Full Marks: 100 Credit 4

UNIT I: Linear Programming:

Definition and Scope of Operations Research, Mathematical formulation of the problem, graphical method, Simplex method, artificial basis technique, dual Simplex method. Degeneracy, alternative optima, unbounded solution, infeasible solution. Introduction to Excel Solver and solving LPP using Excel Solver

UNIT II: Transportation Problem:

Introduction to the problem, LP formulation of a transportation problem. Basic feasible solution by north-west corner method, Vogel's approximation method, least cost method. Finding optimal solution by MODI method, degeneracy, unbalanced transportation problem. Solving Transportation problem using Excel Solver.

UNIT III: Assignment Problem:

One to one assignment problem, optimal solutions, unbalanced assignment matrix, Solving Assignment problem using Excel Solver

UNIT IV: Project Planning through Networks:

Introduction, Basic steps in PERT/CPM techniques, Network diagram representation, Rules of drawing network diagram, Time estimates and Critical path in network analysis, floats, Project evaluation and review technique, Application areas of PERT/CPM techniques

UNIT V: Simulation:

Introduction, Monte-Carlo Simulation, Application to Inventory Control, Application to Queuing Problems

UNIT VI: Sequencing Problems:

Types of Simulation, Steps of Simulation Process, Advantages and Disadvantages of Simulation, Stochastic Simulation and Random Numbers (Monte Carlo Simulation, Random Number Generation) Simulation of Inventory Problems, Simulation of Queuing Problems, Simulation of Investment Problems.

UNIT VII: Introduction to Modeling Module

This module introduces students to real-world operations research-based decision models commonly used in areas of operations, supply chain and logistics planning. The students are also introduced to commercial decision modeling languages and simulation software, along with their application framework and limitations. After students have mastered the software, they work in small teams to apply these models to real-world situations and analyze the results for decision making. The modeling skills learnt in the areas of operations in this course can be transferred to other areas such as marketing, financial analytics and healthcare.

Course Objective and Key-takeaways from the module

Familiarity with decision models and ability to use associated software gives a manager the required edge to efficiently design and allocate scarce resources to gain a competitive advantage for the company. This module is designed to expose students to common decision models, master decision modeling software and analyze results for implementation.

The key takeaways from the module are:

- Understand the mathematical tools required for solving optimization problems
- Understand the repertoire of typical problems solved by management science tools
- Develop the ability to formulate mathematical models for problem situations
- Learn and apply mathematical software to solve mathematical models
- Develop the ability to interpret the solutions of the mathematical models for implementation
- Learn and apply standard heuristic tools for decision making
- Learn and apply simulation software for decision making

Topics:

- Introduction to commercial decision modeling
- Facility Location Models- Set covering models, P-Centre and P-Median models, fixed charge facility location models, hub location models
- Models used in Supply Chains- distribution system design, integrated production and distribution models, supply chain planning and scheduling models

- Models used in Manufacturing- machine and job shop scheduling models, lot sizing models for non-perishable and perishable items
- Vehicle routing models and algorithms- capacitated vehicle routing models, vehicle routing with time windows, vehicle routing with backhauls, vehicle routing with pickup and delivery
- Introduction to Simulation software – ARENA and AnyLogic software
- Simulation Applications- Service, Production and Supply Chain Problems such as modeling of production lines, modeling machine failure, single and multi-product and multi echelon production-inventory system

Suggested Reading:

Textbook:

Sharma, J. K. (2009). Operations research theory and application. MACMILAN Publishers. 4th Edition

Reference Book:

1. Taha Hamdy A., Operations Research: An introduction, 8th edition by Pearson Education.
2. Hiller, F., & Hiller, M. (2003). Introduction to management science: a modeling and case studies approach with spreadsheets (ed.). New York, NY: McGraw-Hill.
3. Vohra, N.D., Quantitative Techniques in Management by, Tata McGraw Hill Publishing Company.
4. Srivastava, U.K., Shenoy, G.V. and Sharma, S.C.(1999): Quantitative Techniques for managerial Decisions. Second edition. New Age Publication
5. Bramel, Julien and Simchi-Levi, David.(1997).The Logic of Logistics-Theory, Algorithms and Applications for Logistics Management.New York,NY:Springer-Verlag.
6. Daskin,M.S.(1995).Network and discrete location:models, algorithms and applications.New York, NY:John Wiley and Sons
7. Goetschalckx, M.(2011). Supply chain engineering. New York,NY:Springer Science+Business Media
8. Hompel, Michael and Schmidt, Thorsten.(2007). Warehouse Management-Automation and Organization of Warehouse and Order Picking Systems. Berlin:Springer-Verlag