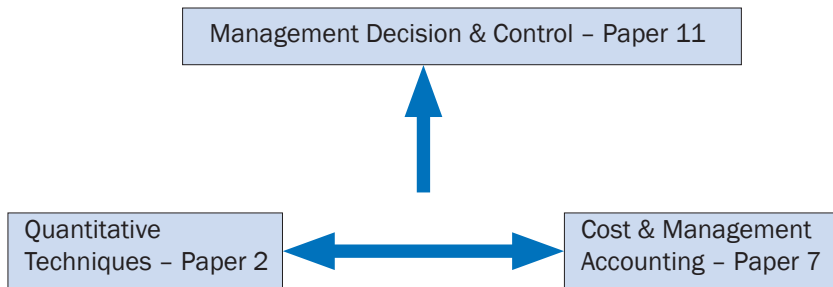


MANAGEMENT DECISION AND CONTROL – PAPER 11

SYLLABUS CHART



OVERALL AIM

To equip the learner with knowledge and skills to enable them understand the critical role management accountants play in organisations and to provide relevant advice in different decision making situations

Learning outcomes

On completion of this course, the learner should be able to:

1. Evaluate the critical role management accountants play in organisations
2. Provide relevant advice in different decision making situations
3. Develop organisational budgets using appropriate techniques
4. Apply quantitative models and accounting control techniques to managerial decisions
5. Measure and evaluate performance of business segments
6. Apply advanced management accounting techniques
7. Apply management in ethical decision making

LEVEL OF ASSESSMENT

The examination will test the ability of the learner to interpret, analyse, evaluate and apply the knowledge and skills acquired to real life situations at their workplace as a cost and management accountant



EXAMINATIONS STRUCTURE

There will be a three hour examination made up sections A and B. Section A will comprise of one compulsory question of 40 marks. Section B will comprise of four questions of 20 marks each, of which the candidate will be required to attempt any three.

DETAILED SYLLABUS

A. INTRODUCTION

1. Nature and role of management accounting:
 - (a) Meaning of management accounting
 - (b) Management decision making process
 - (c) Role of management accounting in the management decision process
 - (d) Behavioural, organisational and social aspects of management accounting
 - (e) Ethical responsibilities of management accountants
2. Management information and communication:
 - (a) Meaning of information
 - (b) Measurement theory
 - (c) Discuss and illustrate the communication of information
 - (d) Value of information
3. The decision making process:
 - (a) The decision making model
 - (b) Decision making as a planning and control process

B. COST-VOLUME-PROFIT (CVP) ANALYSIS

1. Introduction:
 - (a) The economist's CVP model
 - (b) The accountant's CVP model
 - (c) Assumptions and limitations of CVP
2. Application of CVP analysis:
 - (a) Computation of: net profit, breakeven point, contribution and profit volume ratio
 - (b) Meaning of margin of safety
 - (c) Breakeven charts and breakeven points
 - (d) Application of CVP analysis to non-manufacturing decisions

C. APPLICATION OF RELEVANT COSTS FOR DECISION MAKING

1. Introduction:
 - (a) Relevant and irrelevant costs
 - (b) Factors to consider in determining relevant costs and revenue
 - (c) Importance of qualitative factors in decision making
2. Relevant costs of materials and labour



3. Application of relevant cost analysis to decision making:
 - (a) Special pricing decisions (short and long term)
 - (b) Product mix decisions when capacity constraints exist (limiting factor analysis)
 - (c) Outsourcing decisions (make or buy analysis)
 - (d) Discontinuation decisions

D. COSTING SYSTEMS

1. Activity-based costing (ABC)
 - (a) Introduction:
 - (i) The emergence of ABC
 - (ii) Limitations of traditional costing systems
 - (iii) A comparison of traditional and ABC systems
 - (b) Designing an ABC system:
 - (i) Stages involved in designing an ABC system
 - (ii) Factors to be considered in designing ABC systems
 - (iii) Classification of activities
 - (iv) Selection the cost drivers
 - (v) Comparison of ABC with decision relevant costs
 - (c) Application of ABC:
 - (i) ABC profitability analysis
 - (ii) ABC in service organisations
2. Target Costing:
 - (a) Meaning of target costing
 - (b) The target costing process
 - (c) Features of successful target costing implementation
 - (d) The teardown analysis (reverse engineering)
 - (e) Value chain engineering (value chain analysis)
 - (f) Application of target costing
3. Other costing techniques:
 - (a) Life cycle costing
 - (b) Kaizen costing

E. PRICING DECISIONS AND PROFITABILITY ANALYSIS

1. Cost-plus pricing:
 - (a) Methods of cost-plus pricing
 - (b) Target mark-up percentages
 - (c) Limitations of cost-plus pricing
 - (d) Reasons for using cost-based pricing
2. Pricing policies:
 - (a) Price skimming
 - (b) Penetration pricing
3. Customer profitability analysis



- Pareto analysis and customer profitability
- 4. Transfer pricing:
 - (a) Purpose of transfer pricing
 - (b) Alternative transfer pricing methods
 - (c) Resolution of transfer pricing conflicts
 - (d) Domestic and international transfer pricing

F. RISK AND UNCERTAINTY

- 1. Risk and uncertainty
- 2. Decision making model under conditions of uncertainty
- 3. Probability and expected values:
 - (a) Meaning of probability and probability distributions
 - (b) Objective and subjective probabilities
 - (c) Expected value of a probability distribution
 - (d) The degree of uncertainty
 - (e) Attitudes to risk by individuals
- 4. Decision tree analysis:
 - (a) Application of decision trees to decision making situations
 - (b) Determination of possible outcome (profit) and payoff (expected value)
- 5. Pricing decisions and cost-volume-profit (CVP) analysis under conditions of uncertainty
 - (a) Use of cost information for pricing decisions under conditions of uncertainty
 - (b) Problems associated with using probability theory in decision making
 - (c) CVP analysis under conditions of uncertainty
- 6. Perfect and imperfect information
- 7. Maximin, maximax and minimax (regret) criteria
 - Determination of maximin, maximax and minimax (regret)

G. MANAGEMENT CONTROL SYSTEMS

- 1. Introduction to controls:
 - (a) Meaning of control
 - (b) Controls at different organisational levels
 - (c) Types of controls
 - (d) Feedback and feed forward controls
 - (e) Harmful effects of controls
 - (f) Advantages and disadvantages of different types of control
- 2. Responsibility centres:
 - (a) Cost and expense
 - (b) Revenue
 - (c) Profit
 - (d) Investment



3. The nature of management accounting control systems:
 - (a) The controllability principle
 - (b) Dealing with uncontrollable factors before and after the measurement period
4. Setting financial performance targets:
 - (a) Approaches to financial performance target setting:- engineering targets, historical targets, negotiated targets
 - (b) Importance of setting high targets
 - (c) Participation in the budgeting and target setting process
 - (d) Side effects of using accounting information on performance evaluation

H. BUDGETING AND BUDGETARY CONTROL

1. The role of budgeting in organisations:
 - (a) Budgets in an organisation
 - (b) Conflicting roles of budgets
2. The budgeting process:
 - (a) The budget manual
 - (b) The budget period
 - (c) Administration of budgets
 - (d) Stages in the budget process for an organisation
 - (e) The budget process in not-for-profit organisations
3. Budgets:
 - (a) Preparation and uses of various budgets including departmental budget, cash budget and master budget
 - (b) Application of specialised software packages in budgeting
4. Approaches to budgeting:
 - (a) Activity-based budgeting
 - (b) Incremental budgeting
 - (c) Zero-based budgeting
 - (d) Flexible budgeting and forecasts

I. STANDARD COSTING AND VARIANCE ANALYSIS

1. Operation of a standard costing system
2. Objectives of standard costing
3. Variance analysis:
 - (a) Determination of variances
 - (b) Reconciliation of budgeted and actual profits
 - (c) Determination of costs under standard absorption costing
 - (d) Mix and yield variances
 - (e) Disposition of variances
 - (f) Criticisms of standard costing variance analysis



J. DIVISIONAL PERFORMANCE EVALUATION

1. Organisational structure and decentralisation
 - (a) Functional organisational structure
 - (b) Divisional organisational structure
 - (c) Profit and investment centres
 - (d) Merits and demerits of decentralisation
2. Prerequisites for successful decentralisation
3. Divisional performance measurement:
 - (a) Managerial performance
 - (b) Economic performance
 - (c) Alternative divisional profit
 - (d) Return on investment
 - (e) Residual income
 - (f) Economic value added
4. Other considerations:
 - (a) Assets to be included in the investment base
 - (b) The impact of inflation and depreciation on capital investment decisions
 - (c) The impact of performance measurement on capital investment decisions
 - (d) Divisional cost of capital
 - (e) Addressing dysfunctional consequences of short term performance measures
5. Executive contracts and bonus plans:
 - (a) The role of bonus and incentive contracts
 - (b) Types of incentives
 - (c) Forms of incentives and compensation plans
 - (d) Evaluation of accounting-based incentive compensation schemes
 - (e) Bonus plans

K. COST ESTIMATION AND REGRESSION ANALYSIS

1. General principles and application to estimating cost functions:
 - (a) Regression equation
 - (b) Multi regression analysis
 - (c) Cost functions
 - (d) Factors to be considered when using past data to estimate cost functions
 - (e) Steps involved in estimating cost functions
2. Cost estimation methods and their application:
 - (a) Engineering method
 - (b) Inspection of accounts method
 - (c) Graphical including scatter graph method
 - (d) High-low method
 - (e) Least squares method



3. Test of reliability:
 - (a) The coefficient of determination
 - (b) Standard error of the estimate
 - (c) Standard error of the coefficient
4. Learning curve theory:
 - (a) The learning curve effect and its applications
 - (b) The experience curve and its applications

L. PLANNING AND CONTROL OF INVENTORY

1. Introduction:
 - (a) Reasons for holding inventory
 - (b) Relevant costs for quantitative models under conditions of certainty
2. Economic order quantity (EOQ):
 - (a) Determination of EOQ (using various methods)
 - (b) Assumptions of EOQ formula
 - (c) Application of EOQ model
 - (d) Uncertainty and safety stocks
3. Application of activity based costing (ABC) to inventory management
4. Other considerations in inventory management
5. Materials requirement planning
6. Just-in-time (JIT) purchasing
7. Other inventory management techniques

M. LINEAR PROGRAMMING

1. Uses of linear programming:
 - (a) Single and two resource constraints
 - (b) Uses of linear programming
2. Application of graphical and simplex methods to solve linear programming problems
3. Interpretation of solutions (including computer solutions):
 - (a) Interpreting the final matrix
 - (b) Opportunity cost (shadow) price
 - (c) Substitution process when additional resources are obtained
4. Sensitivity analysis and ascertainment of the range over which opportunity cost applies for each constraint
5. Application of linear programming to capital rationing and budgeting
6. Practical problems in applying linear programming in real life situations

N.

O. COST MANAGEMENT AND STRATEGIC MANAGEMENT ACCOUNTING

1. Introduction:
 - (a) The importance of cost management
 - (b) The need for accurate cost measurement systems
2. Activity-based management (ABM):
 - (a) The ABM process



- (b) The relationship between ABM and ABC
 - (c) Advantages and disadvantages of ABM
3. Benchmarking:
 - (a) The benchmarking process
 - (b) Areas in which an organisation can benchmark
 - (c) Importance of benchmarking
 - (d) Difficulties in benchmarking
 - (e) Use of benchmarking process to improve performance
 4. Business process re-engineering:
 - (a) Steps taken in business process re-engineering
 - (b) Advantages and criticisms of business process re-engineering
 - (c) Uses of business process re-engineering
 5. Management audits: objectives and importance
 6. Value chain analysis:
 - (a) The structure of value chain
 - (b) The primary and secondary activities of value chain
 - (c) Value chain analysis and competitive advantage
 - (d) Importance of value chain analysis
 7. Just-in-time (JIT) philosophy:
 - (a) Operation of the JIT system
 - (b) The benefits of JIT
 - (c) Characteristics and limitations of JIT system
 - (d) Effects of JIT in strategic management accounting
 8. Total quality management (TQM):
 - (a) The TQM process
 - (b) Characteristics of a TQM
 - (c) Costs of quality management
 - (d) Effects of TQM in strategic management accounting
 9. Environmental cost management:
 - (a) The importance of environment cost management
 - (b) Environment costs incurred by organisations
 10. The balanced scorecard:
 - (a) Applications of the balanced scorecard
 - (b) Advantages and limitations of using the balanced scorecard

RECENT DEVELOPMENTS

1. The impact of the changing business environment to cost and strategic management accounting
2. The effect of the changing product life cycle on the performance of an organisation
3. The focus on customer satisfaction and new management approaches
4. The traditional manufacturing systems versus modern manufacturing systems (JIT &



- Optimum Production Technology) how they impact the performance of an organisation
5. Advanced manufacturing technologies and how they impact the performance of an organisation

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2. Bhilmani Andrew, Datar SM, Foster Gand Horngen Charles T (2005), Cost Accounting Prentice Hall 12th Edition
3. Drury JC (2008), Management and Costing Accounting, Chapman & Hall, London, UK, 7th Edition
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