MANAGEMENT DECISION AND CONTROL



SYLLABUS CHART

Management Decision & Control - Paper 10



Quantitative Techniques Paper 3



Cost & Management Accounting Paper 6

OVERALL AIM

To equip the learner with knowledge and skills to analyse financial and nonfinancial information to support management decisions and provide advice in different situations

LEARNING OUTCOMES

On completion of this course, learners should be able to:

	Learning outcomes	K	С	A	An	S	E
1.	Discuss the role of a management accountant in an organisation		✓				
2.	Provide advice in different management decision making situations			✓			
3.	Develop organisational budgets using appropriate techniques			✓			
4.	Apply quantitative models to managerial decision problems			✓			
5.	Apply accounting control techniques to managerial decisions			✓			
6.	Evaluate performance of business segments						\
7.	Apply advanced management accounting techniques			V			

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

EXAMINATIONS STRUCTURE

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

DETAILED SYLLABUS

A. MANAGEMENT INFORMATION AND COMMUNICATION

- (a) Meaning, sources and attributes of information
- (b) Communication of information
- (c) Value of information
- (d) Measurement theory

B. NATURE AND ROLE OF MANAGEMENT ACCOUNTING

- (a) Meaning of management accounting
- (b) Role of management accounting in the decision making process
- Behavioural, organisational and social aspects of management accounting
- (d) Ethical responsibilities of a management accountant

C. RELEVANT COSTS/REVENUE AND DECISION MAKING

- 1. Introduction:
 - (a) Relevant and irrelevant costs/revenue
 - (b) Factors to consider in determining relevant costs and revenue
 - (c) Importance of qualitative factors in decision making
- 2. Decision making process
 - (a) The decision making model
 - (b) Decision making as a planning and control process
 - (c) Decision making environment: Certainty, risk, fundamental uncertainty, competition
- 3. Relevant costs of materials and labour
- 4. Application of relevant cost analysis to decision making:
 - (a) Special pricing decisions (short and long-term)
 - (b) Limiting factor analysis
 - (c) Outsourcing decisions; make or buy analysis

(d) Discontinuation decisions

D. 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 model:
 - (a) Computation of: Contribution, net profit, profit volume ratio, breakeven point,
 - (b) Margin of safety
 - (c) Breakeven charts
 - (d) Application of CVP model to non-manufacturing decisions

E. COSTING SYSTEMS

- Activity-based costing (ABC):
 - (a) Introduction:
 - (i) The emergence of ABC
 - (ii) Limitations of traditional costing systems
 - (iii) Comparison of traditional and ABC systems
 - (b) Designing an ABC system:
 - (i) Stages involved
 - (ii) Factors to be considered
 - (iii) Classification of activities
 - (iv) Selection of cost drivers
 - (v) ABC and decision relevant costs
 - (c) Application of ABC:
 - (i) To profitability analysis
 - (ii) In service organisations
- 2. Target costing:
 - (a) Meaning
 - (b) Process
 - (c) Features of successful target costing implementation
 - (d) Teardown analysis/ reverse engineering

- (e) Value chain engineering/ analysis
- (f) Application of target costing
- 3. Other costing techniques: Life cycle, Kaizen, back flush, throughput costing

F. 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 strategies:
 - (a) Price skimming
 - (b) Penetration pricing
 - (c) Other pricing strategies including discrimination, differentiation, volume discounting, product bundling
- 3. Customer profitability analysis
 - (a) Pareto analysis and customer profitability
 - (b) Profit maximisation and optimality: Price and output levels
- 4. Transfer pricing:
 - (a) Purpose
 - (b) Methods
 - (c) Conflicts and their resolution
 - (d) Domestic and international transfer pricing

G. RISK AND UNCERTAINTY

- 1. Meaning of risk and uncertainty
- 2. Probability and expected value:
 - (a) Meaning of probability and probability distribution
 - (b) Objective and subjective probabilities
 - (c) Expected value of a probability distribution
 - (d) Degree of uncertainty
 - (e) Attitudes to risk

- 3. Decision tree analysis:
 - (a) Application
 - (b) Determination of possible outcomes and payoffs
- 4. Pricing decisions and CVP analysis
 - (a) Cost of information for pricing decisions.
 - (b) Use of probability theory in decision making
 - (c) CVP analysis under conditions of uncertainty
- 5. Decision making under:
 - (a) Perfect and imperfect information
 - (b) Conditions of uncertainty: Maximin, maximax and minimax (regret) criteria
- 6. Risk reduction and diversification

H. MANAGEMENT CONTROL SYSTEMS

- 1. Introduction:
 - (a) Controls at different organisational levels
 - (b) Types of controls: Cultural, planning, cybernetic, reward and compensation, administrative
 - (c) Feedback and feed forward controls
 - (d) Advantages and disadvantages of different types of control
- 2. Responsibility centres for:
 - (a) Cost/ 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

I. **BUDGETING AND BUDGETARY CONTROL**

- 1. The role of budgeting in an organisation; conflicting roles of budgets
- 2. The budgeting process:
 - (a) The role of 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:
 - (i) Sales budget
 - (ii) Departmental / functional budgets
 - (iii) Cash budget
 - (iv) 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) Beyond budgeting
 - (e) Flexible budgeting
- 5. The role of leverage in budgeting and budgetary control:
 - (a) Operating leverage
 - (b) Financial leverage
 - (c) Combined leverage

J. 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 and variance analysis

K. DIVISIONAL PERFORMANCE EVALUATION

- 1. Organisational structure and decentralisation
 - (a) Functional and divisional organisational structures
 - (b) Profit and investment centres
 - (c) Merits and demerits of decentralisation
 - (d) Prerequisites for successful decentralisation
- 2. Divisional performance measurement:
 - (a) Managerial performance
 - (b) Economic performance
 - (c) Alternative divisional profit
 - (d) Return on investment
 - (e) Residual income
 - (f) Economic value added
- Other considerations:
 - (a) Assets to be included in an investment base
 - (b) Impact of inflation, depreciation and performance measurement on capital investment decisions
 - (c) Divisional cost of capital
 - (d) Dysfunctional consequences of short-term performance measures and how to address them
 - (e) Value-based management
- 4. 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

L. COST ESTIMATION AND REGRESSION ANALYSIS

- Cost functions
 - (a) Regression equation
 - (b) Use of past data to estimate cost functions
 - (c) Steps involved in estimating cost functions
- 2. Cost estimation methods and their application:
 - (a) Engineering method
 - (b) Inspection of accounts method
 - (c) 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 and coefficient
- 4. Application of learning curve and experience curve theories

M. 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 by tabulation, graphical and formula methods
 - (b) Assumptions of EOQ
 - (c) Application of EOQ model
 - (d) Uncertainty and safety stocks
- 3. Application of ABC/ Pareto analysis to inventory control
- 4. Other considerations in inventory management
- 5. Material requirements planning
- 6. Just-in-time (JIT) purchasing
- 7. Other inventory management techniques

N. LINEAR PROGRAMMING

- 1. Uses of linear programming:
 - (a) Single and multiple resource constraints
 - (b) Uses of linear programming

- 2. Application of graphical and simplex methods to linear programming problems
- 3. Interpretation of solutions (including computer generated solutions):
 - (a) 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

O. COST MANAGEMENT AND STRATEGIC MANAGEMENT ACCOUNTING

- 1. Introduction:
 - (a) Meaning and characteristics of strategic management accounting
 - (b) Importance of cost management
 - (c) Need for accurate cost measurement systems
- 2. Activity-based management (ABM):
 - (a) The ABM process
 - (b) The relationship between ABM and activity-based costing
 - (c) Advantages and disadvantages of ABM
- 3. Benchmarking:
 - (a) The benchmarking process
 - (b) Importance of benchmarking
 - (c) Difficulties in benchmarking
- 4. Business process re-engineering:
 - (a) Steps involved
 - (b) Advantages and criticisms
 - (c) Uses
- 5. Management audits: Objectives and importance
- 6. Value chain analysis:
 - (a) The structure of a value chain
 - (b) Activities of a 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) Benefits of JIT
 - (c) Characteristics and limitations of JIT
 - (d) Effects of JIT in strategic management accounting
- 8. Total quality management (TQM):
 - (a) The TQM process
 - (b) Characteristics of TQM
 - (c) Costs of quality management
 - (d) Effects of TQM in strategic management accounting
- 9. Environmental cost management:
 - (a) The importance of environmental cost management
 - (b) Environmental costs incurred by organisations
- 10. Balanced scorecard:
 - (a) Application of balanced scorecard
 - (b) Advantages and limitations of using balanced scorecard
- 11. Impact of changing business environment on cost and strategic management accounting

P. CONTEMPORARY DEVELOPMENTS

- Effect of the changing product life cycle on the performance of an organisation
- 2. Focus on customer satisfaction and new management approaches
- Traditional manufacturing systems versus modern manufacturing systems (JIT & Optimum Production Technology) and their impact on performance of an organisation

REFERENCES

- 1. ICPAU, Management Decision & Control, Kampala.
- 2. Arora, M. N., 2021. Cost Accounting: Principles & Practice, 13th ed, Vikas Publishing House.
- 3. Colin, D., 2015. Management and Costing Accounting, 9th ed, Cengage Learning.
- 4. Kurt, H., 2010. Essentials of Managerial Accounting, International Edition, South-Western Cengage Learning.
- 5. William, S., 2013. Operations Management, Theory and Practice, 11th ed, McGrawHill.