

Professional II Stage

Internal Control & Risk Management (ICR)

The process of management is primarily that of decision-making, planning and control. In the volatile and complex environment in which organisations operate the risk element in each and every transaction is considerable. Management accountants are often called upon to devise appropriate control systems to safeguard the well being of the organization. He or she must be well aware of risks both internal & external and be able to manage each type of risks appropriately and efficiently.

Learning aims:

- Understand the role of the management accountant with regard to internal control and risk management
- Ability to evaluate the organisation's current internal controls in all areas of operation and make recommendations to improve internal control systems.
- Undertake special audits according to the needs of the organization.
- Understand the requirements of the external auditors.
- Identify and define the risks of a business organisation and evaluate & recommend alternative strategies and identify ways of managing risk.
- Understand the nature of internal control, what it seeks to achieve, and its various inter-related components

Assessment will be through a written examination of three hours duration.

Syllabus Content

Knowledge	Comprehension	Application
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1. Overview of Internal Control (*Study Weighting – 5%*)

1.1 Nature and scope of internal control

- Define and identify the objectives of internal control.
- Identify and explain the various components of internal control (control environment, risk assessment, control activities, information & communication) and how they are inter-related
- Describe the role of the Internal Auditor
- Describe types of audits and the nature, objective and scope of an audit
- Relationship between internal and external audit and difference between internal audit and external audit in terms of responsibility, scope and procedures.

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✓		
✓		

1.2 Limitations and Responsibilities of internal control

- Discuss the limitations of internal control
- Explain the role that various stakeholders (management, board of directors, internal auditors, other personnel) have with respect to internal control

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	✓	

2. Internal Control Procedures (*Study Weighting – 15%*)

2.1 Outline and explain the following steps in the control process

- Development of objectives
- Measurement of results
- Comparison of actual performance against objectives

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	✓	
	✓	

	Knowledge	Comprehension	Application
- Analysis of the causes of differences		✓	
- Determination of appropriate managerial action		✓	
- Taking action		✓	
- Continuing reappraisal		✓	
2.2 Distinguish between preventive, detective and corrective controls, discuss their merits and provide examples of each		✓	
2.3 Discuss the impact of following organisational concepts on organisational control : segregation of duties, decentralization, line and staff, authority and responsibility, span of control		✓	
2.4 Explain the role that the control environment plays in overall organizational control and discuss the contribution of the following components:			
- The individuals within the organization (e.g., Integrity, ethical values, fears, competence)		✓	
- The environment in which individuals operate (e.g., Management's philosophy and leadership style, organizational structure, methods of assigning authority and responsibility, personnel policies and procedures, external environment)		✓	
2.5 Discuss common human responses to control and effective methods to deal with such responses.		✓	
3. Internal Control System (<i>Study Weighting – 10%</i>)			
- Outline and describe the process of developing a system of internal control		✓	
- Describe the process of conversion of the conceptual (logical) model to a physical model			✓
- Evaluate the following alternative physical design options and assess the merits of each			
- Alternative processing modes such as batch, on-line, distributed and decentralized		✓	
- Computer design alternatives such as in-house, timesharing, service bureaus		✓	
- Software development alternatives such as in-house development, pre-packaged, software houses		✓	
4. Management Audit (<i>Study Weighting – 15%</i>)			
- Analyse financial statistics and establish trends and relationships			✓
- Outline and describe the stages of a management audit and demonstrate the ability to perform a management audit for an organisation as a whole or for various activities such as MIS, cash management, materials handling etc. within an organisation			
- Management and systems review			✓
- Establishment of objectives and policies			✓
- Objectives vs. Needs – Instances where objectives do not meet needs.			✓
- Process of implementation			✓
- Monitoring results			✓
- Demonstrate ability to monitor projects			✓
- Describe efficiency assessment			✓

	Knowledge	Comprehension	Application
- Use of checklists to determine the extent of policy implementation			✓
- Use of checklists to determine the extent of adherence to “good practice” in all operations the company			✓
- Understand the use of internal audit questionnaires and methods such as sampling & testing in conducting management audits		✓	
- Problems encountered in management audits and remedial action to solve or avoid such problems		✓	
- Awareness of other types of auditing such as value for money audits and social and environmental audit and how they are different from management audits and internal audits.		✓	
5. - Describe and explain the importance of corporate governance, good business ethics and professional ethics in business organizations		✓	
- Awareness of historical perspective and international developments in relation to corporate governance [should include a general awareness of the principles of corporate governance discussed in the Turnbull Guidance of Internal Control (ICA, England & Wales 1999), Sarbanes - Oxley Act 2002 (USA) and the Combined Code on Corporate Governance – 2003 U.K.]		✓	
6. Overview of Risk Management (<i>Study Weighting – 5%</i>)			
- Define risk	✓		
- Identify types of risk – (for e.g. operational, financial, environmental & reputation) and understand the different perspectives of risk. (for e.g. risk as an opportunity, as a threat or as a form of uncertainty)		✓	
- Understand drivers of risk		✓	
- Implications & benefits of risk management		✓	
- Understand the importance of a overall view of the risks faced by an organisation, the importance of planning for business continuity and having a disaster recovery plan	✓		
7. Risk and Control in IT systems. (<i>Study Weighting – 20%</i>)			
- Explain the objectives and the content of information systems.		✓	
- Describe the link between the information system and internal control system of an organisation		✓	
- Discuss risks and exposures in computer-based information systems		✓	
- Outline computer control objectives and identify responsibility for control		✓	
- Discuss the various aspects of control in a computerized environment, e.g., Physical, logical, hardware, software	✓		
- Discuss elements of the control environment, i.e., Management philosophy and operating style, organizational structure, methods to communicate the assignment of authority and responsibility, management control methods, systems development methodology, controls over system selection, acquisition/development, implementation, program changes, personnel management methods, external controls	✓		
- Discuss issues relating to risk assessment, i.e., Economic, technical, operational, behavioural, risk exposures, probability of loss, consequences, preventive, detective, corrective strategies.	✓		
- Discuss risks to be protected against, e.g., Errors in use, theft of hardware,	✓		

	Knowledge	Comprehension	Application
fraud, software, supplies, unauthorized use, vandalism, software piracy, virus attacks, system failure			
- Discuss computer control activities relating to the accounting system including facilities that can be utilised such as computer aided audits , audit trail etc....			✓
- Describe specific computer control procedures, i.e., authorization, separation of functions, adequacy of documentation and records, safeguarding of assets, limitation of access, independent checks on performance, access control (physical, logical), backup recovery, disaster planning		✓	
- List and describe specific types of controls, including those pertaining to data integrity, privacy, security, continuity of processing, disaster recovery, IS processing and operations		✓	
- Describe the role of management, users, internal auditors and external auditors in monitoring of control compliance		✓	

8. Investment Risks & Returns (*Study Weighting – 10%*)

- Explain how financial markets value risk and how investors trade off risk against expected returns		✓	
- Identify and explain the common statistical measures of dispersion used in finance to measure risk (i.e., Variance and standard deviation)		✓	
- Define the term portfolio and explain what is meant by portfolio theory, covariance and correlation		✓	
- Explain the concept of diversification and how it relates to portfolio risk		✓	
- Define and distinguish between systematic and unsystematic risk		✓	
- Define operating leverage/business risk, calculate it and assess its benefits and limitations			✓
- Define financial leverage/financial risk, calculate it and assess its benefits and limitations			✓
- Define and calculate combined leverage, and explain its impact on earnings per share (EPS)			✓
- Explain the role of the capital asset pricing model (CAPM) in determining the risk of an individual security and know what is meant by the following terms: beta, risk free rate, market risk premium		✓	
- Know how and when to use the security market line			✓

9. Managing Interest Rate Risk (*Study Weighting – 10%*)

- Define interest rate risks and identify sources of interest rate risks		✓	
- Describe and apply internal hedging methods – smoothing, matching, netting			✓
- Describe and apply external methods – forward contract, SWAPs, options, futures			✓

10. Managing Exchange Rate Risk (*Study Weighting – 10%*)

- Introduction to foreign exchange markets		✓	
- Understand exchange rates (direct & indirect quotes, cross exchange rates, spot & forward)			✓
- Understand and apply Interest rate parity, Purchasing power parity and the Fisher effect			✓
- Apply internal methods of managing exchange rate risks – dealing in own currency, netting, matching, leading & lagging etc.			✓
- Describe and apply external methods to manage exchange rate risks – forward contracts, futures, money market hedge, SWAPs and options			✓

Strategic Financial Management (SFM)

Strategic Financial Management is a course of the techniques and applications of the finance function of business. The emphasis of this course is on application as well as theory. Managers are often called upon to answer three important questions. First, "What is the long-term investment strategy of the organization?" This is the investment decision and primarily concerns the left side of the balance sheet. Second, "How can we raise cash for these investments?" This is the financing decision and primarily concerns the right side of the balance sheet. Third, "What short-term investments should we acquire and how should we finance them?" These are the decisions of short-term finance and are associated with a firm's net working capital.

The course contains both descriptive and analytic subject matter. The descriptive material provides the background for the decision making models and techniques and includes the nature and characteristics of primary and secondary capital markets, the income tax system as it pertains to capital cost allowance and shareholder's income from property, and the structure of financial institutions.

The analytical material deals with techniques and models for liquidity and current asset/liability strategies (the level of working capital), the value of the firm as a function of its debt/equity mix (the capital structure), and optimal retention or dividend policies (the distribution of profits of the firm).

Learning aims

- Understand the role of the management accountant in financial management
- Understand the time value of money
- Ability to carry out a valuation of shares and other investments
- Ability to assess the cost of capital of an organization
- Ability to develop a financial plan
- Ability to manage short and long-term finances.
- Ability to identify and evaluate sources of finance
- Ability to explain the relationships between decisions concerning investment, financing and dividends

Assessment will be through a written examination paper of 3 hours duration.

Syllabus Content

	Knowledge	Comprehension	Application
1. Scope & Environment of Financial Management (Study Weighting – 5%)			
1.1 Role of financial managers			
- Outline the primary activities, duties and skills of financial managers (i.e., raising and investing funds in an efficient manner)	✓		
1.2 Goals of Financial Management			
- Describe the primary goal of finance and how it differentiates from profit maximization	✓		
- Identify potential conflicting goals of financial management among stakeholders (e.g., managers, shareholders, society) and problems associated with agency	✓		
1.3 Financial Markets & Institutions			
- Describe the term "financial markets"	✓		
- Describe financial institutions (such as merchant banks, stock brokers, venture capitalists etc.)	✓		

	Knowledge	Comprehension	Application
- Differentiate between a primary offering and secondary trading and explain the importance of each		✓	
- Define and distinguish between money markets and capital markets		✓	
- Identify and describe other major financial markets (intermediate- and long-term debt markets, international financial markets)	✓		
- Discuss the concept of market efficiency and its benefits to the economic system		✓	
- Define the meaning and explain the role of various types of derivatives, such as options and futures, and the market for them		✓	

Measures of Shareholder Wealth

Be familiar with and be able to apply currently utilized measures of shareholder wealth such as EVA (Economic Value Added), differentiate them from ROI (return on investment) and RI (residual income), and discuss their relative merits

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2. Valuation (Study Weighting – 20%)

2.1 Time Value of Money

- Explain the concept of the time value of money and how it relates to the economist's view of opportunity cost
- Describe and be able to calculate present values, future values and annuities through the use of compound interest and interest tables (ordinary and due)
- Describe and be able to calculate yield based on time relationships between cash flows with the help of compound interest and interest tables
- Distinguish between nominal and real returns
- Calculate the impact of inflation on the time value of money

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	✓	
		✓

2.2 Valuing stocks & bonds

- Describe the process of valuing financial securities
- Describe the yield curve and discuss theories explaining its shape
- Calculate the current value (price) of bonds, preferred shares, and common shares based on the future benefits (cash flows) via Gordon's growth model

✓		
	✓	
		✓

2.3 Cost of Capital

- Explain the concept of cost of capital and how it may be used
- Demonstrate the ability to calculate cost of debt, cost of preferred shares, cost of common shares
- Demonstrate the ability to determine the weighted average cost of capital

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		✓
		✓

3. Capital Budgeting / Investment Appraisal (Study Weighting – 10%)

- Identify alternative approaches to dealing with risk in capital projects (e.g., Sensitivity analysis, adjusting the hurdle rate)
- Explain and consider the impact of factors such as political risk, cash flows, discount rate, terminal value and foreign exchange in international capital budgeting decisions
- Explain the impact of strategic, non-financial and qualitative factors in capital budgeting decisions
- Calculate net present value (NPV), internal rate of return (IRR) and adjusted net present value (APV)

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	✓	
	✓	
		✓

	Knowledge	Comprehension	Application
- Use techniques to select among capital projects when faced with limited funds (capital rationing)			✓
- Describe the post acquisition audit and explain the role it plays in capital investment decisions			✓
- Discuss agency theory as it applies to capital budgeting decisions		✓	
- Explain and illustrate how sensitivity analysis can help managers cope with uncertainty		✓	
- Explain and illustrate how sensitivity analysis can be applied to capital budgeting			✓

4. **Financial Planning & Dividend Policy Decisions** (*Study Weighting – 40%*)

4.1 *Financial forecasting & planning*

- Apply cash flow planning principles to forecasting cash flows and planning long and short-term sources and uses of funds			✓
- Develop pro forma financial statements			✓

4.2 *Short & intermediate-term financial planning & management*

- Define "working capital management"	✓		
- Explain the relationship between liquidity and return		✓	
- Explain and apply the principles of cash management (including preparation of forecasts, group cash flow management, link between cash and profit etc.)			✓
- Explain and apply the principles of managing accounts receivable (understand the credit cycle, payment terms, assessing credit worthiness, evaluation of settlement discount schemes, interpretation of an age analysis statement etc.)			✓
- Explain and apply the principles of managing inventory			✓
- Explain and apply the principles surrounding accounts payable and bank loans			
- Describe the components of effective accounts payable management	✓		
- Explain the cost of not taking trade discounts		✓	
- Explain how organizations can use bank loans and money markets for short-term financing (OD, Short term loans, invoice discounting)		✓	
- Short term export financing (documentary credit, bills of exchange, factoring etc.)		✓	
- Determine the effective cost of various sources of short-term financing			✓
- The effect of short term borrowing on the measurement of gearing			✓
- Discuss reasons for leasing	✓		
- Identify and describe the various categories of leases	✓		
- Apply discounted cash flow concepts to leasing decisions			✓
- Explain the principles surrounding venture capital	✓		
- Discuss the roles that computers and communications technologies are playing in cash management (e.g., Electronic funds transfer, electronic data interchange)		✓	
- Types of short term investments (interest bearing bank accounts, negotiable instruments, treasury bills etc.)		✓	

- Financial Management of small & mid-sized businesses

	Knowledge	Comprehension	Application
• Identify some of the major differences between managing the finances of a small organization as compared to a large organization	✓		
• Identify the important components of cash management in a small organization	✓		
• Explain the importance of the relationship with the banker	✓		
• Identify some of the methods small firms can use to obtain financing	✓		
• Describe what is involved in the process of going public	✓		

4.3 Long-Term Financing

- Identify and define the key features and terminology associated with long-term debt (e.g., Face value, collateral, repayment, seniority, indenture, maturity, etc.)
- Give examples of typical debt securities (notes, debentures, bonds etc.) and the identifying features of each
- Compare the features of long-term debt to those of equity financing (tax implications, rights and risks of creditors vs. shareholders, etc.)
- Identify the primary focus of bond ratings (risk of default) and describe the impact it has on interest rates
- Discuss bond yields and bond prices
- List and describe the different bond-rating classes
- Define preferred shares, outline the rights of preferred shareholders, and calculate the different tax treatment and resulting after-tax income from preferred dividends compared to bond interest
- Define common shares and outline the rights of common shareholders
- Define the following terms: rights, convertible securities, warrants, futures, options, swaps
- Discuss the relative merits and calculate the cost/value of the various sources of long-term financing identified above
- Describe the process for raising funds in the capital market
- Explain the role of the investment dealer

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	✓	
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	✓	

4.4 Capital structure policy

- Describe the theory of capital structure, including its impact on the cost of equity capital, and describe how organizations determine an optimal capital structure

✓		
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4.5 Corporate Dividend Policy

- Explain the criteria management uses to determine whether profits should be reinvested or paid out as dividends
- Outline the factors to be considered in the development of a dividend policy (e.g., Legal rules, cash position, tax position of shareholders, access to capital markets, corporate control, etc.)
- Outline the procedures involved in dividend payments
- Describe the impact of stock splits and stock dividends on the position of the shareholders
- Discuss the reasons for the repurchase of shares

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Knowledge	Comprehension	Application
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5. **Mergers , Acquisitions and Business Valuations** (*Study Weighting – 15%*)

- Explain acquisitions and mergers as a form of business strategy
- Explain sources of synergy from mergers & acquisitions (e.g. revenue enhancement, cost reductions, tax gains, cost of capital etc.)
- Describe the alternative methods of acquiring another firm (purchasing assets, purchasing shares, exchange of shares etc.)
- Explain the tax implications that should be considered in business mergers & acquisitions
- Describe the impact of acquisition on EPS
- Describe principles of business valuation (e.g. assessing risk and growth potential, reliability of historical information, maintaining earnings, seller vs. buyer perspective)
- Identifying and valuing the worth of a business using the following approaches
 - Using asset approaches (net book value, net realizable value)
 - Using earnings approaches (e.g. earnings multiple approach)
 - Using cash flow based approaches (e.g. NPV)

✓		
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6. **International Financial Management** (*Study Weighting – 10%*)

Discuss the impact that participation in international business will have on the following functional areas and issues.

- Financial management and capital structure
- International capital budgeting
- International working capital and cash flow management
- Financial risk management (see detailed syllabus in Risk Management)

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	✓	
	✓	
✓		

Strategic Management Accounting (SMA)

The candidate must fully comprehend how controllability relates to responsibility and understand the impact that performance measures have on human behaviour. The management accountant must be able to establish appropriate responsibility centres, transfer prices, performance measures and reward systems that will ultimately lead to the achievement of organizational objectives.

Capital budgeting, pricing, performance measurement and cost management play a key role in the contents of this course. Candidates are also expected to be fully conversant with topics covered in previous stages.

Learning aims:

- Understand and apply the principles of investment appraisal
- Identify business problems involving allocation of scarce resources and recommend solutions using management accounting techniques as well as taking account of non-financial considerations.
- Explain the importance of and be able to employ multiple performance measures
- Awareness of factors influencing pricing decisions and ability to contribute to pricing decisions in the business environment
- Ability to calculate transfer prices together with a good understanding of the objectives and behavioural implications of transfer pricing decisions
- A good understanding and application of cost management systems (including recent developments)

The assessment will be through a written paper of three hours duration.

Syllabus Content

Knowledge	Comprehension	Application
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1. Decision making & analysis (study weighting 10%)

Product mix, sales mix and market mix problems

- Identify business problems that arise in relation to allocation of scarce resources
- Identify problems that can be solved by limiting factor analysis or linear programming
- Apply limiting factor analysis and linear programming
- Construct a decision model using tools such as decision tables and decision trees in order to solve problems
- Understand and explain limitations of decision analysis under uncertainty

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2. Pricing & performance evaluation (study weighting 40%)

2.1 Pricing

- Recognize the major influences on pricing decisions (e.g., customers, competitors, and costs)
- Distinguish between short-term and long-term pricing decisions
- Apply the cost-based, demand-based and target costing approaches to pricing
- The relevance of learning curve effect in setting prices
- Explain the effects of competition laws on pricing

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Knowledge	Comprehension	Application
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2.2 *Transfer Pricing*

- Discuss the objectives of transfer pricing
- Identify three general methods for determining transfer prices (market-based, cost-based, negotiated)
- Apply appropriate transfer pricing methods (e.g., market-based, cost-based, negotiated), utilize relevant selection criteria, and discuss the merits and limitations of each of the methods
- Describe the behavioural implications of transfer pricing decisions
- Compute an appropriate transfer price that is consistent with transfer pricing principles
- Identify the major differences between domestic and international transfer pricing objectives
- Identify factors that influence international transfer pricing decisions (e.g., exchange rate, political climate, taxation, remittances etc.)
- Describe the behavioural implications of transfer pricing policies in multinational companies
- Explain how imposed transfer pricing affects behaviour

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3.1 *Responsibility Accounting*

- Discuss the merits of decentralization vs. centralization and identify when each is appropriate
- Differentiate cost centres, revenue centres, profit centres and investment centres.
- Recognize how controllability relates to responsibility accounting
- Demonstrate ability to prepare appropriate performance reports
- Explain the behavioural implications of responsibility accounting systems

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3.2 *Performance evaluation and reward systems*

- Measuring performance in cost centres, revenue centres, profit centres and investment centres
- Explain the importance of considering time horizons when developing performance measures (long-term vs. short-term focus)
- Differentiate between evaluating managers vs. Organizational units
- Describe the appropriate use of variance results in managing performance.
- Explain the importance of and be able to employ multiple performance measures (Financial and Non Financial)
- Demonstrate the ability to calculate return on investment and residual income, and identify the merits and limitations of each method in evaluating investment centres
- Designing accounting based performance measures.
- Choosing targets to compare performance
- Team based compensation arrangements
- Executive performance measures and compensation
- Factory Incentive Schemes

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Knowledge	Comprehension	Application
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3 Capital Budgeting (Study weighting 30%)

- Understand the importance of capital budgeting as a decision making and control tool
- Stages of capital budgeting
- Apply the following methods to predict outcomes during the selection stage of capital budgeting and explain the relative merits of each.
 - net present value (identify relevant cash inflows & outflows, using the compound interest tables, calculate present values)
 - internal rate of return
 - payback & accounting rate of return
- Use the steps required for the net present value approach:
 - identify relevant cash inflows and outflows, (e.g. initial investment, disposal cost of old machines, operating cash flows, terminal disposal price of investments, tax shield, treatment of depreciation for tax.)
 - Calculate present values using appropriate discount rates and draw appropriate conclusions.
- identify alternative approaches to dealing with risk in capital projects (e.g. sensitivity analysis, adjusting the hurdle rate)
- explain and consider the impact of factors such as political risk, cash flows, discount rates, terminal value, foreign exchange in international capital budgeting decisions
- explain the impact of strategic, non financial and qualitative factors in capital budgeting decisions
- use techniques to select among capital projects when faced with limited funds (capital rationing)
- describe the post acquisition audit and explain the role it plays in capital investment decisions
- discuss agency theory as it applies to capital budgeting decisions

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4 Cost Management (Study weighting 20%)

- Application of ABC in manufacturing & service industries
- Direct product profitability & customer product profitability (DPP & CPP)
- Cost Reduction Programmes
- Theory of Constraints and throughput contribution analysis
- Demonstrate knowledge of JIT systems
- Target costing & value analysis
- Product life cycle costing

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