



**Certified
Management
Accountants™**

2011 CMA COMPETENCY MAP ENTRANCE REQUIREMENTS

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OVERVIEW

INTRODUCTION

The CMA Competency Map (the Map) was developed after extensive consultation with various stakeholders, particularly employers of CMAs. It provides a structured approach for CMAs and CMA candidates with which to build, confirm, and maintain their competencies.

The CMA Competency Map Entrance Requirements (Entrance Requirements) specify the competencies that are relevant to what employers and clients expect of entry-level management accountants. Successful completion of these requirements will prepare candidates for the Strategic Leadership Program (SLP), which will focus on the best of emerging and contemporary practices in business strategy, management, and accounting.

The SLP, in conjunction with the practical experience requirement, will prepare candidates to take leadership roles in their organizations upon graduation.

THE FOUNDATION OF THE CMA PROFESSION

The CMA designation rests on a foundation of three interrelated and interdependent dimensions – accounting, management, and strategy. These three pillars of the profession form a knowledge base supporting the wider business territory that many different designations, degrees, and specialized programs seek to serve. Balanced integration across these three dimensions defines the differentiated territory of CMAs as strategic management accounting professionals. Although the pillars are non-hierarchical, they are presented in the sequence in which prospective CMAs typically master them. Accounting is often a prerequisite to developing higher-level management skills which, in turn, are usually necessary for the fulfilment of strategic responsibilities within an organization. Consequently, the Entrance Examination will focus more on accounting skills than on management and strategy skills.

THE CMA'S ACCOUNTABILITY MANDATE

CMA Canada focuses on three activities: 1) protection of the public, 2) meeting the needs of stakeholders in the marketplace, and 3) ensuring the continuing relevancy of the profession. What differentiates CMAs from others on the management team is their responsibility for and expertise in the accountability framework for their organizations. Management of risk and the efficient and effective use of limited resources are central to this framework.

The CMA's accountability framework for CMAs is comprised of two components – performance and conformance. Both areas of competence must be balanced and are reflected in the Map.

Performance responsibilities focus on strategy, value creation, and resource utilization. These responsibilities take a forward-looking view and include the following:

1. Helping organizations formulate, implement, and evaluate strategy.
2. Understanding the organization's appetite for risk and its key drivers of performance.
3. Identifying the critical point at which the organization needs to make decisions.

Conformance responsibilities, which take an historic view, focus on the provision of assurances, primarily to senior management and boards of directors, concerning the following:

1. The effective management of strategic and operational risks.
2. The effective and efficient achievement of the organization's strategic and operational goals.
3. The accurate and reliable operations of the systems that generate financial and non-financial information in a manner that reflects the true performance of the organization.
4. The fulfilment of management's fiduciary responsibilities.
5. The assurance that the organization is able to detect and prevent fraud, theft, and misappropriation.

CMA COMPETENCY MAP

In general terms, competence is defined as the ability to perform successfully in a given context through the use of appropriate skills or capacities. This is a relational concept, in that it refers to the relationship between performance and skills/capacities. In the context of professionalism in accounting, competence is defined as "the ability to perform a work role to a defined standard with reference to working environments. To demonstrate competence in a role, a professional accountant must possess the necessary (a) professional knowledge, (b) professional skills, and (c) professional values, ethics, and attitudes."¹ The Map outlines the combination of technical expertise and personal characteristics that are expected of CMAs by society, employers, clients, and members.

Competency Stages

CMAs are strategic management accounting professionals, who can begin their careers at relatively junior levels pre-certification, progress quickly to positions in the middle layers of management, and finally rise to senior-level positions. The Map articulates a structured approach to developing, confirming and maintaining core competencies over the four stages of development of a typical CMA's career:

- Competency Stage 1 (CS-1): Acquisition (entry-level)
- Competency Stage 2 (CS-2): Basic Proficiency (SLP)
- Competency Stage 3 (CS-3): Advanced Proficiency (CMA, professional development)
- Competency Stage 4 (CS-4): Mastery (CMA, professional development)

The Map is organized by competency stage and describes the functional and enabling competencies within each stage. CMA Canada recognizes that the profession attracts and develops qualified members from a range of relevant career and academic backgrounds and that individuals pursue the CMA designation at various stages in their respective careers. The Entrance Requirements explains in detail the expected CS-1 competencies.

¹ Framework for International Education Standards for Professional Accountants, International Accounting Education Standards Board, IFAC, December 2009, paragraph 12.

Competency Stage 1 (CS-1): Acquisition

At this stage of competency development, the candidate is focused on acquiring the specific body of knowledge and related career skills that support the development of the core competencies necessary to achieve the CMA designation. Individuals acquire the foundational body of knowledge through structured academic studies either at a recognized post-secondary institution or in a specialized program of instruction offered by a CMA Canada affiliate at the provincial/territorial level. Accordingly, the competency statements detailed in this Entrance Requirements document refer to a given profit-oriented, not-for-profit, and public sector/government organization.

The Entrance Examination evaluates general suitability for entry to Competency Stage 2 and the Strategic Leadership Program.

CMA Competencies

The Map describes the following six functional competencies and four enabling competencies that support the differentiated territory for CMAs as strategic management accounting professionals:

Functional Competencies	Enabling Competencies
F1 Strategic Management	E1 Problem Solving and Decision Making
F2 Risk Management and Governance	E2 Leadership and Group Dynamics
F3 Performance Management	E3 Professionalism and Ethical Behaviour
F4 Performance Measurement	E4 Communication
F5 Financial Management	
F6 Financial Reporting	

Functional Competencies:

The six functional competencies represent the core value proposition for the CMA profession. As such, they are the skills that need to be understood in order to meet performance expectations and organizational goals within the context of a constantly changing environment. In essence, functional competencies are the goal-driven methodologies by which CMAs shape the performance of their organizations.

The applicability of each of these tools and techniques in a particular situation depends on the circumstances faced by the organization at the time. Therefore, sound judgement is essential in selecting the tools that are appropriate for the given task or question.

Enabling Competencies:

The enabling competencies reflect personal attributes and distinguish CMAs from other professionals working in the area of strategic management accounting. Variations in the environment in which the functional competencies are applied require individuals to adjust the requisite enabling competencies in order to perform at expected levels.

Functional and enabling competencies are of equal importance in carrying out specific tasks related to the accountability mandate. Functional competencies are task-dependent, whereas enabling competencies accommodate the context, variability, and individuality associated with the demonstration of competence.

The Entrance Requirements provide details of the foundational body of knowledge and skills required in the CS-1 functional and enabling competencies. Further details pertaining to the Map, including a full description of the four competency stages, can be found on the CMA Canada website: www.cma-canada.org.

PURPOSE OF THE ENTRANCE REQUIREMENTS

The purpose of the Entrance Requirements is to provide an indication of the competencies and foundational body of knowledge that entry-level CMA candidates are expected to have acquired through structured academic studies at a recognized post-secondary institution or in a specialized program of instruction offered by a CMA Canada partner at the provincial/territorial level. Although the Map provides the competencies and foundational body of knowledge in general, the Entrance Requirements provides more detail on the specific competencies, topics and sub-topics. It also provides an indication of the topics that are testable on the Entrance Examination, how each topic will be tested, the candidates' expected skill level for each topic, and the relative emphasis placed on each of the six functional competencies.

ELIGIBILITY REQUIREMENTS

Prior to writing the Entrance Examination, potential candidates must demonstrate their mastery of the CS-1 functional and enabling competencies by achieving a minimum standard on the full range of required topics from a university business program or a combination of holding a university degree and studying the required topics through university courses and/or CMA Canada partner programs. These topics include both foundational topics and the topics that are reflected in the functional competencies. The major required topic areas are as follows:

- Economics
- Corporate Finance
- Financial Accounting (introductory, intermediate, and advanced)
- Human Resources
- Information Technology
- Internal Control
- Management Accounting (introductory, intermediate, and advanced)
- Marketing
- Operations Management
- Statistics
- Strategic Management
- Taxation

For further information on whether a potential candidate has satisfied the eligibility requirements, please contact the nearest CMA Canada provincial/territorial office.

OBJECTIVE OF ENTRANCE EXAMINATION

The objective of the Entrance Examination is to evaluate whether candidates have acquired the CS-1 competencies indicated in the Map. The Entrance Examination will focus mainly on the technical skills of candidates within the accounting, risk management, and financial components of the six functional competencies through the use of multiple-choice questions.

DESIGN AND STRUCTURE OF THE ENTRANCE EXAMINATION

- 100% multiple-choice questions, both single stand-alone questions and multiple problem-based questions (i.e. several questions based on a common scenario)
- 100 to 120 questions
- 4 hours in duration
- Testing emphasis:

CS-1 Functional Competency		Range
F1	Strategic Management	5-15%
F2	Risk Management and Governance	5-15%
F3	Performance Management	20-30%
F4	Performance Measurement	10-20%
F5	Financial Management	10-20%
F6	Financial Reporting	15-25%

- At least 80% of the Entrance Examination will emphasize the core topics of Management Accounting, Financial Accounting, Corporate Finance and Taxation per the applicable functional competencies
- E1 Problem Solving and Decision Making competencies tested in conjunction with functional competencies
- Topics tested according to the cognitive skill level indicated in the Entrance Requirements
- Not all questions weighted equally
- Pass mark of 60%

RESPONSIBILITY FOR ENTRANCE REQUIREMENTS COMPETENCIES AND SKILLS

The Entrance Requirements are divided into the two broad competency categories as follows:

Functional Competencies — The foundational body of knowledge that a candidate is expected to have studied through post-secondary studies and programs prior to enrolling in the SLP. The specific competencies, topics, and sub-topics listed are directly testable on the Entrance Examination at the skill levels indicated.

Enabling Competencies — Due to the nature of the Entrance Examination, many of these competencies cannot be tested directly on the Entrance Examination. Some of the problem solving and decision making competencies (E1) are testable in conjunction with the functional competencies. Although most of the enabling competencies cannot be tested directly on the Entrance Examination, candidates are expected to attain these competencies through their post-secondary studies.

The SLP will build on both functional and enabling competencies, progressing from CS-1: Acquisition to CS-2: Basic Proficiency. Candidates will be required to demonstrate that they have acquired the CS-2 level competencies throughout the SLP.

In order to communicate what is expected of Entrance Examination candidates, each of the six functional competency sections includes the following:

Objectives — An indication of the cognitive skills and learning objectives for each competency.

Disciplinary Domains — An indication of the areas of study within post-secondary programs that are relevant to the competencies, topics, and sub-topics detailed in the Entrance Requirements for the particular functional competency.

E1 – Problem Solving and Decision Making — The extent to which the problem solving and decision making enabling competency can be tested in conjunction with the functional competency.

Cognitive Skill Level — The cognitive skill level that can be tested on the Entrance Examination for each topic and sub-topic listed for the functional competencies. Two levels of cognitive skills, based on Bloom’s Revised Taxonomy of Educational Objectives, are specified as follows:

	R/U	A/A
1. Remembering and Understanding (R/U) — This is the most basic level of learning and requires the recognition and recall of basic facts, as well as a demonstration that the material is understood.	✓	
2. Application and Analysis (A/A) — This level involves the use of knowledge and comprehension. After learning rules, principles and quantitative methods, this knowledge is applied to problem situations. This level implicitly involves the E1 competencies, i.e. the ability to make choices through the application of relevant decision criteria and make recommendations regarding appropriate courses of action.		✓

The required cognitive skill levels are indicated by checkmarks in the appropriate columns to the right of each topic and subtopic.

While this document indicates the cognitive skill levels expected of candidates with regard to the Entrance Requirements, CMA Canada recognizes the difficulty of indicating *precisely* what is expected for each topic and sub-topic. Candidates are encouraged to interpret the terms used in this document broadly to prepare themselves sufficiently for the examination and for entry into the SLP.

As indicated earlier, the Entrance Requirements were developed with the objective of ensuring that candidates have acquired an understanding of topics that are relevant to employers. Some candidates may not have been exposed to certain topics or topic areas that are included in this document in their academic careers to date. In this case, it may be necessary for such candidates to undertake supplementary studies in these areas to meet the eligibility requirements and to prepare for the Entrance Examination. Please contact the nearest CMA Canada provincial/territorial office for additional information regarding supplementary studies and examination preparation.

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FUNCTIONAL COMPETENCIES

TOPICS DIRECTLY TESTABLE ON ENTRANCE EXAMINATION

F1 STRATEGIC MANAGEMENT

The functional competency of *strategic management* pertains to the ability to chart a path to achieve sustainable value creation within an organization.

Objectives:

The candidate is able to

- *formulate* and *explain* the role of a given organization's mission and vision statement;
- *analyze* an organization's internal and external environment;
- *define* and *critique* an appropriate strategy for a given organization; and
- *describe* the steps in the strategy implementation process for a given organization.

Disciplinary Domains:

The relevant disciplinary domains are primarily strategic management, marketing, operations management, management control systems, and human resources.

Strategic management covers the theories, methods and models used by organizations for strategic planning. Strategies at different levels of the organization provide plans that management uses to coordinate the activities of the various functions and units of an organization in an effort to achieve organizational objectives. An understanding of strategic management provides a foundation for other disciplines required of the management accountant.

Knowledge of the basic principles of **marketing** is essential for improving an organization's differentiation profile. To attain a CS-1 level of competency for this category, a thorough grounding in market segmentation, buyer characteristics, and attributes of product/service offerings of an organization and its rivals is expected. An understanding of the relationship between management accounting and the marketing function is important for enabling accounting personnel to interface effectively with marketing personnel.

The management accountant often plays an important role in the design and implementation of the operational and logistical activities of the organization. The function of **operations management** is to facilitate efficient flow of products/services from the suppliers to customers. To achieve this function, candidates must appreciate how operations management may assist the organization to achieve lower costs and/or higher quality. Knowledge of the basic principles underlying this discipline is expected at the CS-1 level, as is an appreciation of the strategic importance of this function to the organization.

The fields of **management control systems and human resources** play important roles in the implementation of a strategy. Candidates must understand how organizational design and management control systems help organizations achieve a given strategy.

E1 – Problem Solving and Decision Making:

The emphasis on support for decision making provides for the expectation that, although candidates might not hold positions of decision-making authority in their respective organizations, competency at the CS-1 level nonetheless requires an appreciation of the

relevant issues that must be considered when making a decision and the ability to provide relevant information and analysis to appropriate decision-making authorities within an organization. As such, the Entrance Examination will test the candidates' ability to not only identify and describe relevant concepts, but also their ability to apply these concepts and to determine, analyze and decide between potential alternatives in the formulation and implementation of an organization's mission, vision, value proposition and strategies for achieving its objectives.

F1.1 Mission/Vision

Defining what the organization aspires to be and how this will be achieved.

	R/U	A/A
1.1.1 <i>Identifies components of mission and vision statements for a given organization</i>		
1.1.1.1 Describes vision in terms of a desired future state		
a) Understands that vision is a fundamental statement of an organization's values, aspirations, and long-term goals	✓	
b) Explains components of a successful vision and outlines reasons an organization's vision may fail	✓	✓
c) Formulates an organization's vision		✓
1.1.1.2 Describes mission in terms of product or service, geographic area and stakeholders served		
a) Understands that a mission statement focuses on an organization's present business scope whereas a vision statement focuses on where the organization wants to be in the future	✓	
b) Evaluates if a mission statement outlines an organization's purpose, business and core values, as well as establishes a basis for competition and competitive advantage	✓	✓
c) Explains why mission statements should address the needs of multiple stakeholders	✓	
d) Formulates an organization's mission statement and updates it as the organization's competitive context changes	✓	✓
1.1.2 <i>Explains the role of mission and vision statements in organizational performance for a given organization</i>		
1.1.2.1 Describes how mission and vision statements are used to set goals/objectives for the organization		
a) Understands that goals/objectives convert the mission and vision into specific performance targets (i.e. results and outcomes the organization wants to achieve)	✓	
b) Understands the criteria for setting meaningful goals/objectives (e.g. specific, measurable, appropriate, attainable, realistic, timely, tangible)	✓	
c) Formulates both financial and non-financial goals/objectives with specific, short-term and long-term measurable targets that aim towards fulfilling the mission/vision of the organization	✓	✓

	R/U	A/A
1.1.2.2 Describes how mission and vision statements align all organizational activities		
a) Understands that strategy identifies how the mission, vision and goals/objectives will be achieved in light of the organization's situation and prospects	✓	
b) Explains how mission and vision statements assist in the evaluation of strategic alternatives	✓	
c) Understands that resource allocation should align with the organization's mission, vision and strategy	✓	
1.1.3 <i>Explains how mission and vision statements impact corporate culture and public image for a given organization</i>	✓	

F1.2 Strategy Formulation

Setting strategic direction by designing a value proposition (what we sell, to whom we sell it, and how to produce it efficiently) which takes advantage of the organization's strengths and opportunities while mitigating its weaknesses and avoiding external threats.

	R/U	A/A
1.2.1 <i>Performs an external scan for a given organization (i.e. identifies an organization's external opportunities and threats using various models such as PESTE, Porter's Five Forces and SWOT)</i>		
1.2.1.1 Describes and conducts Political, Economic, Socio-Demographic, Technological, and Environmental (PESTE) analysis		
a) Understands where to obtain information on PESTE factors	✓	
b) Identifies relevant PESTE factors and their potential impact on an organization	✓	✓
1.2.1.2 Describes and conducts Porter's Five Forces competitive/industry analysis		
a) Explains how each of the five basic competitive forces can impact the profitability and strategic planning of an organization	✓	
b) Applies the Porter's Five Forces model to explain why some industries are more profitable than others	✓	✓
c) Prepares a competitor analysis	✓	✓
d) Explains the role of complementors	✓	
e) Understands how PESTE factors may impact the direction and intensity of the Five Forces over time	✓	
f) Applies Porter's industry analysis to identify external opportunities and threats for an organization	✓	✓
1.2.1.3 Describes and conducts profit pool analysis (i.e. identifies where the money is being made along the industry value chain) (see also 3.2.2)		
a) Disaggregates the industry value chain (i.e. documents the flow of goods from raw material suppliers to the end consumer) into different segments	✓	✓

	R/U	A/A
b) Identifies segments in the industry value chain to dominate and then formulates strategies to improve organizational profitability	✓	✓
1.2.1.4 Describes and conducts stakeholder analysis		
a) Identifies key organizational stakeholders (e.g. suppliers, community, employees, unions, clients and government) and their relative influence on the organization	✓	✓
b) Prepares mission statements and strategies that reconcile the interests of various stakeholders	✓	✓
1.2.2 <i>Performs an internal scan for a given organization (i.e. identifies an organization's internal strengths and weaknesses using various models such as value chain analysis and core competence analysis)</i>		
1.2.2.1 Describes and performs value chain analysis		
a) Uses the value chain to describe an organization in terms of the primary and support activities it undertakes to deliver value	✓	✓
b) Demonstrates how value creation in an organization can be improved by identifying and influencing the drivers of each activity	✓	✓
c) Applies value chain analysis to identify potential strengths (i.e. activities that enhance an organization's ability to compete) or weaknesses of an organization (i.e. activities that are better performed by rivals)	✓	✓
1.2.2.2 Describes and performs resource/capability/core competence analysis		
a) Understands why some resources/capabilities/core competencies may enable an organization to attain a competitive advantage	✓	✓
b) Applies resource/capability/core competence analysis to identify potential strengths and weakness of an organization (e.g. a strong reputation that results in consumers being willing to pay more for the product or service is a resource strength)	✓	✓
c) Identifies and appraises the resources/capabilities/core competencies of an organization	✓	✓
d) Applies the value chain to identify an organization's resources/capabilities and core competencies	✓	✓
1.2.3 <i>Analyzes target customers and target markets for a given organization's products/services</i>		
a) Segments market using product and buyer characteristics	✓	✓
b) Determines factors needed to succeed in each market segment	✓	✓
c) Evaluates attractiveness of each market segment by comparing an organization's products/services in each buyer segment and profit potential with those of its rivals	✓	✓
d) Applies market segmentation to position an organization's products/services	✓	✓

	R/U	A/A
1.2.4 <i>Describes different levels of strategy (corporate, business, and functional) for a given organization</i>		
1.2.4.1 Describes an organization's corporate level strategy		
a) Assesses the potential to create synergies between an organization's business units	✓	✓
b) Evaluates the industries in which an organization should compete	✓	✓
c) Evaluates different types of diversification (e.g. related and unrelated)	✓	✓
d) Understands ways to create value through corporate restructuring	✓	
1.2.4.2 Describes an organization's business level strategy		
a) Understands that business level strategies outline how an organization attains and sustains competitive advantages (e.g. identifies what customers to target, what products/services to sell to these customers, how to produce, sell and deliver the products/services)	✓	
b) Explains benefits of being a first mover versus a second mover	✓	
c) Evaluates which activities an organization should perform itself versus outsource	✓	✓
1.2.4.3 Describes an organization's functional level strategy		
a) Prepares functional level strategies that are internally consistent, consistent with the strategies of other functions (e.g. marketing, production, HR, finance), and integrated with the business level strategy	✓	✓
1.2.5 <i>Describes competitive business strategies at different stages of a given industry's life cycle</i>		
a) Understands how competitive strategies can create competitive advantage	✓	
b) Understands competitive rivalry, competitive behaviour, and competitive dynamics at the offering level and how this can change through the industry life cycle	✓	
c) Evaluates and recommends appropriate business strategies for an organization at a given stage of the industry life cycle	✓	✓
1.2.5.1 Describes cost leadership strategy		
a) Identifies sources of cost advantages within an industry	✓	
b) Assesses an organization's cost position relative to its rivals	✓	✓
c) Recommends cost reduction tactics that improve an organization's cost leadership position	✓	✓
d) Outlines competitive risks in following a cost leadership strategy	✓	✓
1.2.5.2 Describes differentiation strategy		
a) Identifies sources of differentiation in terms of customer's preferences	✓	
b) Assesses an organization's differentiation position relative to its rivals	✓	✓
c) Recommends ways to increase customer's willingness to pay which improve an organization's competitive position	✓	✓
d) Outlines competitive risks in following a differentiation strategy	✓	✓
e) Understands how organizations can combine the advantages of cost and differentiation strategies (e.g. best value strategy)	✓	✓

	R/U	A/A
1.2.5.3 Describes divestiture/downsizing strategy		
a) Understands the situations for which a divestiture strategy may be appropriate	✓	
b) Describes ways to restructure an organization	✓	
1.2.5.4 Describes integration strategy		
a) Evaluates the benefits and risks associated with various integration strategies (e.g. vertical, horizontal)	✓	✓
1.2.6 <i>Describes domestic and international growth strategies for a given organization</i>		
a) Explains motives for domestic and international growth	✓	
b) Evaluates the advantages and disadvantages of different international strategies (e.g. international, multi-domestic, global, and trans-national)	✓	✓
c) Outlines risks in entering international markets	✓	✓
d) Evaluates different types of foreign country entry strategies (e.g. export, licensing, alliances, wholly-owned subsidiary)	✓	✓
1.2.6.1 Describes joint ventures		
a) Explains why firms may choose to form a joint venture or an alliance	✓	
b) Understands the risks of alliances and joint ventures	✓	
c) Describes different types of alliances and joint ventures	✓	
d) Explains why alliances and joint ventures may fail and describes attributes of successful alliances and joint ventures	✓	
e) Explains how to manage joint ventures and alliances	✓	
1.2.6.2 Describes mergers and acquisitions		
a) Explains the advantages and disadvantages of mergers and acquisitions	✓	
b) Explains how mergers and acquisitions can improve corporate competitiveness	✓	
c) Explains why mergers and acquisitions may fail and describes attributes of successful mergers and acquisitions	✓	
d) Explains how to manage the post-merger and acquisition integration phase	✓	
1.2.6.3 Describes organic growth		
a) Evaluates methods to achieve organic growth (e.g. product-market exploitation, product development, market development, product-market diversification)	✓	✓
b) Outlines the risks of using organic growth	✓	
c) Explains how to manage organic growth	✓	
1.2.7 <i>Describes a corporate social responsibility strategy for a given organization</i>		
a) Describes how companies can demonstrate social responsibility	✓	
b) Makes a business and moral case for corporate social responsibility	✓	✓
c) Formulates a strategy that satisfies the triple bottom line (i.e. economic, environmental, and social criteria)	✓	✓

1.2.8 *Describes best practices and current innovations in strategy formulation in a given industry (e.g. strategies for the Internet economy, strategies for finding a unique niche to gain competitive advantage such as the Blue Ocean strategy)*

R/U	A/A
✓	

F1.3 Strategy Implementation

Aligning the organization’s resources and success factors to ensure accomplishment of the strategy.

1.3.1 *Describes the elements of organizational design that would help a given organization achieve a given strategy*

R/U	A/A
✓	
✓	
✓	

1.3.1.1 Describes the relative merits of simple, divisional, and matrix designs

1.3.1.2 Describes the relative merits of centralized and decentralized designs

1.3.1.3 Describes the relative merits of a narrow and broad span of control

1.3.2 *Describes how management control frameworks align a given organization’s resources and success factors with strategy*

1.3.2.1 Describes belief systems, organizational cultures, and corporate values

- a) Understands the role an organization’s belief systems, culture and values play in implementing strategy and strategic control systems
- b) Assesses and recommends changes to an organization’s belief systems, culture and values with respect to implementing a chosen strategy

1.3.2.2 Describes the boundary systems, such as codes of conduct, policy manuals, and procedures

- a) Understands the role an organization’s boundary systems play in implementing strategy and strategic control systems
- b) Assesses and recommends changes to an organization’s boundary systems with respect to implementing the chosen strategy

1.3.2.3 Describes the performance measurement and incentive system (e.g. the Balanced Scorecard)

- a) Understands the role an organization’s performance measurement and incentive system plays in implementing strategy and strategic control systems
- b) Assesses and recommends changes to an organization’s performance measurement and incentive system with respect to implementing the chosen strategy

✓	
✓	✓
✓	
✓	✓
✓	
✓	✓

	R/U	A/A
1.3.2.4 Describes the system for continuous monitoring and updating of an organization's strategy		
a) Understands the role an organization's strategic monitoring system plays in implementing strategy and strategic control systems	✓	
b) Assesses and recommends changes to an organization's strategic monitoring system with respect to implementing the chosen strategy	✓	✓
c) Understands the role the board of directors plays in monitoring and updating an organization's strategy (see F2.3.1.1)	✓	
1.3.3 <i>Describes best practices and current innovations in strategy implementation in a given industry (e.g. strategy mapping, entrepreneurial orientation)</i>	✓	

F2 RISK MANAGEMENT AND GOVERNANCE

This functional competency pertains to the ability to evaluate strategic, operational, and financial risks and ensure that these are adequately measured, managed and controlled, while at the same time establishing appropriate governance. This includes the evaluation of internal controls, application of risk reduction strategies, and other governance activities.

Objectives:

The candidate is able to

- *document* the information flow in functional areas within a given organization and *identify* control deficiencies;
- *describe* the risks associated with a given organization's strategies and *prescribe* an appropriate risk response;
- *test* for compliance of activities with a given set of strategies; and
- *identify, research and document* both existing and emerging external compliance issues.

Disciplinary Domains:

The relevant disciplinary domains are primarily strategic management, management control systems, auditing, and information systems. As well, an understanding of business law provides the basis for understanding the inherent legal context of the topics pertaining to this competency.

Knowledge of **strategic management** is essential for assessing an organization's risk profile and understanding the role of corporate governance. To attain a CS-1 level of competency for this category, a thorough understanding is required of how a firm's risk profile stems from what the organization is attempting to accomplish: its strategy. A comprehensive method for identifying the risks the organization faces involves an external scan of environmental threats and an internal scan of an organization's weaknesses. Candidates also need to understand the role that the board of directors plays in monitoring the organization's performance and ensuring that the organization has an appropriate risk management and control system.

The management accountant often plays an important role in the design and implementation of an organization's control and risk management systems. One function of management accounting and **management control systems** is to ensure that strategies are being implemented as intended, which involves monitoring performance and the environment, assessing risk, and proposing appropriate risk responses, among other things. Candidates must appreciate how management control systems, including internal controls, may assist the organization in achieving its strategies while incurring appropriate risk levels. Knowledge of the basic principles underlying management controls systems is expected at the CS-1 level, as is an appreciation of the strategic importance of this function to the organization.

A strong foundation in **auditing** principles and practices is necessary to achieve a CS-1 level of competency. The auditing discipline involves sufficiently understanding the nature of an organization, its environment, and its internal control systems such that the risks of material misstatement of the financial statements can be assessed. The roles and components of internal control, the types of controls, and the role of board governance in reducing fraud and material errors are reviewed in this discipline.

Information systems play an important role in mitigating risk and achieving good governance and control. Candidates must understand accounting transaction risks and appropriate controls, how information systems may enhance internal controls, and how to map business processes.

E1 – Problem Solving and Decision Making:

The Entrance Examination will test the candidates’ ability to not only identify and describe relevant concepts, but also their ability to evaluate an organization’s internal control processes, review its risk management strategies, and assess whether the organization is following good governance principles and is in compliance with established regulatory guidelines.

F2.1 Internal control

Evaluating internal control processes from the risk management perspective.

	R/U	A/A
2.1.1 Documents process flow diagrams for functional areas (e.g. sales, accounts payable, accounts receivable, treasury) for a given organization	✓	✓
2.1.2 Identifies and communicates internal control issues for a given organization		
2.1.2.1 Discusses the objectives and role of internal control with respect to integrity, ethical values, and competence		
a) Explains how an organization’s integrity and internal controls are dependent on proper segregation of duties	✓	
b) Explains how internal controls, such as access controls, authority limits, and validity checks, provide reasonable assurance of the accuracy of an organization’s accounting records and discourage fraud and misappropriation of assets	✓	
c) Discusses how internal controls, such as selection and training of employees, improve the efficiency and effectiveness of an organization’s operations	✓	
d) Explains the role information systems play in an organization’s control system	✓	
e) Recognizes ethical considerations in making business decisions	✓	
2.1.2.2 Explains the impact of the following on overall organizational control: management’s philosophy and leadership style, organizational structure, assignment of authority and responsibility, personnel policies and procedures, and the external environment		
a) Explains how the following improve an organization’s control environment and reduce the potential for deviant employee behaviour: corporate code of conduct, strong ethical culture, organizational structure, assignment of authority and responsibility, and personnel policies and procedures	✓	
b) Explains how the integrity of the CEO and the senior management team sets the “tone from the top”	✓	

	R/U	A/A
c) Explains how an organization's control environment is affected by the external environment (both domestic and international), evaluates the effectiveness of internal controls in light of changes in the external environment, and proposes improvements	✓	✓
2.1.2.3 Defines the interrelated components of internal control (e.g. control environment, risk assessment, control activities, information and communication, and monitoring of controls)		
a) Understand the elements of the control environment (e.g. culture, ethical values, integrity, commitment to competence, personnel policies and procedures, management's philosophy and leadership style, organizational structure, methods of assigning authority and responsibility, participation by those charged with governance) and explains how each contributes to the organization's control system	✓	
b) Understands the role of risk assessment in the development of internal controls for a given organization and the processes it uses to identify business risks and decide on actions that address those risks	✓	
c) Explains how the information system, including the accounting system, and related procedures and records are used in a given organization to initiate, record, process and report transactions, events and conditions	✓	
d) Understands how a given organization communicates roles and responsibilities pertaining to internal control and reports exceptions	✓	
e) Explains how an organization's control activities (e.g. IT controls, physical controls, approvals, verifications, supervision, and security of assets) help ensure that management directives are carried out (see also 2.1.2.1)	✓	✓
f) Understands that monitoring the components of the internal control system, making improvements, and adjusting the system for changes in conditions is necessary to maintain and improve the system's effectiveness	✓	
2.1.2.4 Identifies the steps in the process of developing and maintaining a system of internal controls, including the roles and responsibilities of various stakeholders and internal audit		
a) Explains why the senior management team owns an organization's control system	✓	
b) Explains why the accounting/finance/IT staff are primarily responsible for the development and maintenance of an organization's internal control system	✓	
c) Explains why the board of directors and the audit committee establish guidelines and provide oversight regarding an organization's control system	✓	
d) Explains why the internal auditor tests and suggests improvements to an organization's control system, but should not develop or maintain the system	✓	
e) Explains why external auditors may attest to the effectiveness of an organization's control system	✓	

	R/U	A/A
f) Understands how laws and regulations, such as Section 404 of the Sarbanes Oxley Act of 2002 and Canadian Securities Administrators Multilateral Instruments 52-111 and 52-109, impact an organization's internal control system	✓	
g) Explains the effects of computer-based information systems on internal control, business ethics, and fraud	✓	
h) Outlines and explains the steps in the control process (e.g. developing objectives, measuring results, comparing actual performance against objectives, analyzing the causes of differences, determining appropriate managerial action, taking appropriate action, and continually reappraising)	✓	
i) Explains the process of developing controls to mitigate a specific internal risk (e.g. define the risk, estimate the magnitude/impact of the risk, estimate the likelihood of the risk, identify alternative controls, perform a cost/benefit analysis for each alternative, select a control, implement the chosen control, continuously monitor to ensure the control is achieving its objective)	✓	
2.1.2.5 Describes the potential control problems in established processes (e.g. with respect to segregation of duties, data entry, and output quality) and suggests changes to correct deficiencies that are discovered		
a) Identifies inherent weaknesses in an organization's control system (e.g. human error, management override, collusion, unauthorized use, virus attacks, theft) and proposes improvements (e.g. input controls, independent checks, access controls, disaster recovery, security, preventive/detective/corrective controls, quality assurance, timely recording and reporting, documentation)	✓	✓
b) Evaluates the cost/benefit of existing and proposed internal controls	✓	✓
2.1.2.6 Identifies common employee responses to control and describes methods to deal with such behaviours		
a) Identifies behavioural responses to control (e.g. creation of budget slack, data manipulation, negative attitudes), evaluates the potential of these responses occurring in a given situation	✓	✓
b) Suggests possible ways to reduce the impact of negative responses to control (e.g. code of business conduct and ethics, positive corporate culture, participation, communication of rationale for control)	✓	✓
2.1.2.7 Describes the role of the external auditor		
a) Understands the audit planning process and the expectations of the external auditor	✓	
b) Understands the audit risk model (ARM) and auditor liability	✓	

F2.2 Enterprise Risk Management

Evaluating the organization’s strategies from a risk management perspective.

	R/U	A/A
2.2.1 <i>Defines and distinguishes among strategic risk, operational risk, reporting risk, and compliance risk for a given organization</i>	✓	
a) Defines and gives examples of the types of strategic risk (e.g. economic, industry, social, political, organizational, strategic transaction, technological)	✓	
b) Defines and gives examples of the types of operational risk (e.g. environmental, financial, business continuity, innovation, commercial, project, human resources, health and safety, property, reputation)	✓	
c) Defines and gives examples of the types of reporting risk (e.g. information accuracy, reporting reliability, completeness of financial information, efficiency of the process for internal decision making)	✓	
d) Defines and gives examples of the types of compliance risk (e.g. legal and regulatory, control, professional)	✓	
2.2.2 <i>Identifies external risks (including political, environmental, and social risk) for a given organization</i>	✓	
2.2.2.1 Describes the external risks related to the organization’s strategic objectives, the impact of those risks, and the necessity for risk management		
a) Explains how enterprise risk management can benefit an organization	✓	
b) Describes methods of identifying external risks related to an organization’s strategic objectives (e.g. SWOT, PEST, process flow analysis, brainstorming)	✓	
c) Describes techniques for risk measurement and evaluation (e.g. benchmarking, probabilistic models, sensitivity models, scenario analysis) and calculates the expected losses of an external risk for a given organization using probabilities (magnitude of the monetary loss times probability of occurrence)	✓	✓
d) Understands that, to assess the necessity for managing a risk, the benefits of successfully managing the risk should be weighed against the expected losses of the risk occurring	✓	
2.2.2.2 Explains potential shifts in the external environment and implications of such shifts for a given organization’s exposure to risk		
a) Discusses potential risky events resulting from shifts in the external environment (e.g. shifts in consumer demand, new competitor entering core markets, decrease in supply of essential input, change in government regulations)	✓	
b) Discusses the implications of a shift in the external environment on a given organization’s exposure to risk	✓	
2.2.2.3 Discusses acceptable risk levels		
a) Outlines the role of the board of directors in setting risk levels for an organization	✓	

	R/U	A/A
b) Understands that determination of acceptable risk levels involves assessing how the risk affects the organization's ability to achieve its objectives	✓	
2.2.3 <i>Describes an appropriate risk response strategy, including procedures for managing risk, for a given organization</i>		
a) Discusses the following risk response alternatives and the conditions under which each would be appropriate: accept, share, transfer, reduce/mitigate, avoid	✓	
b) Performs a cost/benefit analysis for each of the risk response alternatives being considered in relation to a specific situation for a given organization	✓	✓
c) Discusses policies and procedures to ensure the chosen risk response is effectively carried out	✓	

F2.3 Governance

Assessing the organization's activities with respect to the appropriateness and achievement of its strategies as well as organizational compliance with established regulatory guidelines.

	R/U	A/A
2.3.1 <i>Understands the role of governance for a given organization</i>		
2.3.1.1 Defines the role and responsibilities of the board of directors		
a) Explains the duties of a member of the board of directors (e.g. duty of care, knowledge, loyalty, due diligence and reasonable business judgement)	✓	
b) Explains the responsibilities of the board of directors (e.g. appoint, monitor, and compensate the CEO, prepare a CEO succession plan, monitor risk levels, appoint external auditor, ensure regulatory compliance, monitor external communications, approve strategic plan and strategic decisions)	✓	
c) Evaluates the quality of the board of directors in terms of carrying out its duties and responsibilities	✓	✓
d) Explains how the Sarbanes Oxley Act of 2002 and the Canadian Securities Administrators Multi-lateral Instruments (e.g. MI 58-101) impact board governance	✓	
2.3.1.2 Defines the relationships between members of management (including the CEO and CFO), the board of directors, the owners (e.g. shareholders, government, etc.), and the other stakeholders of a profit-oriented, not-for-profit, and public sector organization		
a) Explains the duties of each party with respect to achieving effective governance	✓	
b) Understands how various board committees (e.g. audit, executive, CEO compensation committee, nominating, etc.) facilitate good governance	✓	
c) Explains the role internal audit plays in ensuring good governance	✓	
d) Explains the role external auditors play in ensuring good governance	✓	

	R/U	A/A
e) Explains the role regulatory bodies play in ensuring good governance	✓	
f) Explains the role other stakeholders play in ensuring good governance	✓	
2.3.1.3 Defines the nature of information required by the board of directors to fulfill its mandate		
a) Identifies and discusses the financial and non-financial data that should be reported to the board of directors	✓	
b) Identifies and discusses the budget and industry benchmarking data (if applicable) that should be reported to the board of directors	✓	
c) Identifies and discusses the internal and external developments and trends that should be reported to the board of directors	✓	
d) Understands that updates and reports on risk monitoring and compliance should be reported to the board of directors	✓	
e) Explains how peer assessment of members of the board of directors can improve board governance	✓	
2.3.2 <i>Identifies the role of a given organization's code of corporate conduct and ethical values with respect to governance issues and the accomplishment of the organization's strategic objectives</i>	✓	
2.3.3 <i>Identifies and explains the role that a given organization's management incentives play in maintaining organizational compliance</i>		
a) Describes effective managerial reward and incentive systems and explains how they can align management actions with the interests of the organization's stakeholders	✓	
2.3.4 <i>Describes appropriate reporting mechanisms for compliance and risk issues (e.g. risk reporting, whistle-blowing) within the context of a given organization</i>		
a) Explains how a whistle-blowing mechanism reduces the potential for misappropriation of assets or fraud	✓	
b) Describes the roles of the audit committee, external auditor and internal auditor with respect to compliance and risk issues	✓	
2.3.5 <i>Describes best practices and emerging issues in governance for profit-oriented, not-for-profit, and public sector organizations (e.g. impact of increasing shareholder and stakeholder activism)</i>	✓	

F3 PERFORMANCE MANAGEMENT

The functional competency of *performance management* pertains to the ability to implement appropriate systems to support decision making, set performance targets, and monitor performance with respect to the achievement of the targets. Performance management focuses on managing both costs and revenues.

Objectives:

The candidate is able to

- *define* and *describe* the attributes of a given cost management system;
- *apply* cost management systems in computing costs;
- *describe* and *explain* the association between the facets of a cost system and an organization;
- *recommend* an appropriate cost system for a given organization or production environment;
- *describe* the value proposition of a given organization;
- *understand* and *apply* strategies for generating and managing revenues;
- *understand* and *apply* strategies for managing operations, including the determination of optimal production;
- *define* the information that is required to support the value proposition for a given organization;
- *describe* how information technology is used by organizations to support decision making and manage performance with respect to achieving targets; and
- *interpret* the output of and *use* various decision support systems and computerized decision models, such as multiple regression and linear programming models.

Disciplinary Domains:

The relevant disciplinary domains are primarily management accounting, marketing, operations management and information technology/management. As well, an understanding of human resources provides a foundation for understanding how budgets, variances, and other performance measures affect the individual stakeholders, particularly the employees, of an organization.

Management accounting includes the analysis and reporting of financial and non-financial information required by managers in performing their planning and control functions, which includes making decisions to fulfil the goals of an organization. To attain a CS-1 level of competency for this category, a thorough grounding in cost and revenue management (including, for example, cost accounting, budgeting, decision analysis, managing scarce resources, pricing and performance analysis) is expected.

Knowledge of the basic principles of **marketing** is essential for managing the revenues of the organization. An understanding of the relationship between management accounting and the marketing function is important for enabling effective interfacing between marketing and accounting personnel. Consequently, a basic knowledge of the marketing function is expected at the CS-1 level.

Operations management is defined as the design, operation and improvement of systems that create the firm's primary products or services. Global pressure for providing quality, on-time products and services has led to the growing importance of this function of business. The management accountant should recognize that the entity accumulates costs and generates revenues primarily from undertaking to provide goods and services and, as such, there is a close linkage between management accounting and operations management.

The management accountant often plays an important role in the design, implementation and management of information systems for planning and controlling the activities of the organization. The function of **information technology** is to facilitate the achievement of the organization's objectives through the provision of reliable, timely, accurate and relevant information in a cost effective manner. An appreciation of the strategic importance of this function for the organization and the role it plays in enterprise resource planning and customer relationship management is expected at the CS-1 level.

E1 – Problem Solving and Decision Making:

The Entrance Examination will test the candidates' ability to not only identify and describe relevant concepts, but also apply these concepts and determine, analyze, and decide between potential alternative approaches for managing costs and revenues to support an organization's profitability goals.

F3.1 Cost Management

Ensuring the effective and efficient use of organizational resources through the application of appropriate tools and systems.

	R/U	A/A
3.1.1 <i>Understands the concept of costs in a business context</i>		
3.1.1.1 Explains cost classification		
a) Defines, identifies, differentiates and illustrates different classifications of costs (variable vs. fixed, period vs. product, opportunity, sunk, relevant, inventoriable, capital, direct vs. indirect, prime vs. conversion, production, marketing, distribution)	✓	
3.1.1.2 Explains cost behaviour (e.g. fixed costs versus variable costs) and the use of various cost estimation approaches		
a) Understands and explains the behaviour patterns of various types of costs, including linear and non-linear costs, and their relevance to decision making	✓	
b) Understands the parameters, underlying assumptions, and difficulties encountered in cost estimation and explains the steps in estimating a cost function	✓	
c) Understands various approaches for estimating costs (account analysis, work measurement and conference) and determines the cost function using the high-low method	✓	✓
d) Interprets and explains the results of cost estimation and regression analysis	✓	✓

	R/U	A/A
e) Differentiates between simple and multiple regression	✓	
f) Understands and applies appropriate criteria for choosing among cost functions (goodness of fit, significance of explanatory variables, economic plausibility and specification analysis)	✓	✓
3.1.1.3 Explains the components of cost of goods sold		
a) Identifies and calculates the components of cost of goods sold for service, merchandising and manufacturing organizations (work-in-process, finished goods, purchases, materials, labour and indirect costs)	✓	✓
b) Prepares a schedule of cost of goods manufactured and cost of goods sold		✓
3.1.1.4 Explains cost of capacity (practical, normal and full)		
a) Defines the concept of capacity and distinguishes between theoretical (design) and practical (effective) capacity	✓	
b) Understands the concept of capacity utilization and differentiates between normal, full and master budget capacity utilization	✓	
c) Identifies the costs of capacity and explains the relationship between the costs of capacity and the choice of alternative capacity measures	✓	
d) Understands and determines the effects of alternative choices of capacity concepts, and capacity levels on management decisions, e.g. product costing decisions, pricing decisions, performance evaluation, etc.	✓	✓
e) Understands downward demand spirals	✓	
3.1.2 <i>Understands cost management systems in the context of a given organization</i>		
3.1.2.1 Defines, describes and applies methods of calculating product and service costs		
a) Defines, describes and compares alternative costing systems and concepts, and explains the circumstances under which each is appropriate: normal vs. actual, job vs. process, activity-based, variable (direct) vs. absorption	✓	
b) Cost allocation and activity-based costing (ABC)		
• Explains the concept of cost drivers in relation to cost management and provides examples of cost drivers for various business functions and activities	✓	
• Differentiates actual from applied overhead costs	✓	
• Demonstrates the distortions in product costing and profitability that can occur from using of a single overhead cost driver versus multiple overhead cost pools		✓
• Understands the concept of activity and cost hierarchies in an activity-based costing system such as output unit level, batch level, product sustaining, facility sustaining, customer level, etc.	✓	
• Applies activity-based costing techniques for a given organization		✓

	R/U	A/A
c) Job costing <ul style="list-style-type: none"> • Applies manufacturing overhead to determine product costs given the choice of an appropriate overhead cost driver • Calculates product or service costs in a job costing system using normal, standard and actual costing • Prepares the income statement for an organization that uses job costing, including accounting for end-of-period, under- or over-applied (allocated) indirect costs 		<ul style="list-style-type: none"> ✓ ✓ ✓
d) Process costing <ul style="list-style-type: none"> • Explains the concept of equivalent units of production and costs per equivalent unit under the weighted-average and first-in first-out (FIFO) methods • Prepares a production report and determines product/service costs under weighted-average and FIFO methods • Differentiates between normal and abnormal spoilage and how to account for them 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓
e) Direct (variable) and absorption costing <ul style="list-style-type: none"> • Identifies and compares the features of direct (variable) costing and absorption costing • Applies direct and absorption costing approaches in inventory costing, financial statement preparation, and decision making • Interprets and utilizes financial statements under direct and absorption costing for decision making and financial analysis 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓
3.1.2.2 Defines, describes and applies joint cost allocation methods <ul style="list-style-type: none"> a) Describes the role of joint and by-product costs in decision making b) Identifies and calculates product and by-product costs using various joint cost allocation methods (physical measure, sales value at split-off, estimated net realizable value, constant gross margin percentage net realizable value) c) Understands and applies the methods of accounting for by-products 	<ul style="list-style-type: none"> ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓
3.1.2.3 Defines, describes and applies departmental costing and cost allocation methods <ul style="list-style-type: none"> a) Explains the purpose, process and behavioural implications of departmental cost allocation, and identifies the criteria used in cost allocation decisions b) Compares and contrasts the various methods of cost allocations (direct, step-down, reciprocal) c) Allocates costs among departments utilizing the reciprocal, step-down and direct methods 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓
3.1.2.4 Describes current innovations in costing systems and explains the conditions under which these would be appropriate <ul style="list-style-type: none"> a) Understands other costing systems (hybrid, project, operations, backflush, etc.) 	<ul style="list-style-type: none"> ✓ 	<ul style="list-style-type: none">

	R/U	A/A
<p>3.1.3 <i>Identifies and describes strategic cost management techniques for a given organization</i></p> <p>a) Business process re-engineering (BPR)</p> <ul style="list-style-type: none"> • Describes BPR and explains its relevance for cost management 	✓	
<p>b) Activity-based management (ABM)</p> <ul style="list-style-type: none"> • Distinguishes ABM from ABC and understands how ABM is used to improve operations and processes, satisfy customers and generate profits • Describes and applies process value analysis (PVA), e.g. identifies root causes of problems through driver analysis, identifies non-value added activities, etc. • Describes how cost reduction is achieved through activity management • Describes activity-based financial performance measurement • Distinguishes financial-based from activity-based responsibility accounting with regard to assignment of responsibilities, establishing performance measures and evaluating performance 	✓	✓
<p>c) Process mapping (process flow charting, blueprinting, analysis, etc.)</p> <ul style="list-style-type: none"> • Explains the importance of charting a process for cost management • Understands and applies process mapping for process design, redesign, and improvement for a given organization (e.g. prepares a process map/flow chart, identifies process weaknesses and strengths, etc.) 	✓	✓
<p>d) Total quality management</p> <ul style="list-style-type: none"> • Explains the different concepts of quality (e.g. fitness for use, design, conformance to specifications, customer satisfaction, etc.) and distinguishes total quality management from the traditional approach to quality management • Explains and applies various quality management tools for a given organization (e.g. Pareto analysis, fishbone cause-and-effect diagram, scatter diagram, control chart, run chart, process capability analysis, etc.) 	✓	✓
<p>e) Costs of quality</p> <ul style="list-style-type: none"> • Describes, distinguishes and calculates the various classifications of costs of quality (prevention, appraisal, internal failure and external failure), and explains the effect that each has on the other • Explains the concept of continuous improvement and the impact it has on reducing the costs of quality • Describes the Taguchi loss function and explains its use for management and control of quality 	✓	✓
<p>f) Target costing</p> <ul style="list-style-type: none"> • Distinguishes traditional costing from target costing, and explains how target costing relates to target pricing • Explains the concepts of value engineering, cost incurrence and locked-in costs in the target costing framework • Computes the target cost of a product 	✓	✓

	R/U	A/A
g) Theory of constraints (TOC)		
• Describes the concept of TOC and explains the operational measures of system performance defined by TOC, e.g. throughput contribution, investments (inventory), operating costs	✓	
• Explains and performs a TOC analysis to improve system performance (e.g. drum-buffer and rope)	✓	✓
h) Kaizen costing		
• Explains the kaizen cost reduction process and the concept of kaizen standards	✓	
i) Life cycle costing		
• Describes life cycle costing and the components of a product's life cycle costs	✓	
• Explains the role of life cycle costing in budgeting and pricing decisions	✓	
3.1.4 <i>Describes cost management tools used in planning and decision making in the context of a given organization</i>		
3.1.4.1 Identifies and describes the different types of budgets		
a) Explains the role of budgets and describes the features of the budgeting process	✓	
b) Describes various types of budgets and their components (e.g. master, revenue, cash, capital, operating, discretionary cost, etc.)	✓	
c) Describes kaizen budgeting and activity-based budgeting and explains the merits of each	✓	
3.1.4.2 Identifies the information inputs needed to prepare the different types of budgets		
a) Describes the role of sales forecasts, interest rates, exchange rates, probabilities and other inputs in the preparation of budgets	✓	
b) Prepares various types of budgets for a given organization (e.g. master, revenue, cash, purchases, capital, marketing, pro forma financials, etc.)		✓
c) Prepares an analysis of the impact of investing and borrowing decisions on cash flow and budgeting		✓
3.1.4.3 Describes and calculates budget variances		
a) Explains the differences in accounting systems between standard, normal, and actual costing environments	✓	
b) Describes the advantages and disadvantages of using standard costs	✓	
c) Defines and identifies different types of standards and distinguishes between ideal and practical standards	✓	
d) Explains how standards are set for direct materials and direct labour	✓	
e) Explains and prepares flexible and static budgets for a given organization	✓	✓
f) Calculates the following cost and revenue variances for a given organization:		
• Static-budget variances		✓
• Flexible-budget variances		✓
• Direct materials price, quantity/efficiency, mix, and yield variances		✓

	R/U	A/A
<ul style="list-style-type: none"> • Direct labour rate, efficiency, mix, and yield variances • Variable overhead spending and efficiency variances • Fixed overhead production-volume/denominator and budget/spending variances • Sales/revenue price variance • Sales/revenue volume, mix, and quantity variances based on contribution margin • Market share and market size/volume variances 		<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ ✓ ✓
g) Interprets and explains the significance of various cost and sales/revenue variances	✓	
h) Explains and applies the various approaches used by managers for deciding when to investigate variances and which variances to investigate for a given organization	✓	✓
3.1.4.4 Performs cost-volume-profit (CVP) analysis for a given organization		
a) Describes the assumptions and limitations underlying CVP analysis	✓	
b) Describes the information requirements to perform CVP analysis	✓	
c) Performs a CVP analysis for single-product and multiple-product situations		✓
3.1.4.5 Performs breakeven, relevant cost, contribution margin, linear programming, sensitivity, and uncertainty analyses		
a) Breakeven analysis <ul style="list-style-type: none"> • Calculates breakeven using alternative approaches (e.g. graphical, equation, contribution method), including consideration of sales mix and income tax 		✓
b) Relevant costing <ul style="list-style-type: none"> • Applies the concept of relevant costs and relevant revenues to a wide range of decisions 		✓
c) Contribution margin analysis <ul style="list-style-type: none"> • Computes contribution margin and gross margin and utilizes each appropriately in planning and decision making • Applies contribution margin analysis to short-term planning situations including those involving scarce resources 		<ul style="list-style-type: none"> ✓ ✓
d) Linear programming <ul style="list-style-type: none"> • Describes the assumptions underlying the use of linear programming • Formulates simple and complex linear programming problems and solves simple problems (i.e. those with two variables) • Interprets linear programming solutions 	<ul style="list-style-type: none"> ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓
e) Sensitivity analysis <ul style="list-style-type: none"> • Explains and illustrates how sensitivity analyses can be applied to capital budgeting, CVP, relevant costing, contribution margin analysis and other planning tools • Applies and interprets sensitivity analysis in linear programming situations, e.g. shadow prices, binding constraints, changes in objective function, etc. 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓
f) Decision analysis and uncertainty		✓

	R/U	A/A
<ul style="list-style-type: none"> Explains and applies various tools for dealing with uncertainty in making decisions (e.g. decision tables, decision trees, expected value analysis, expected value of perfect information, etc.) 	✓	✓
3.1.4.6 Describes information system requirements for cost accumulation		
a) Understands and explains the various activities comprising transaction cycles (e.g. revenue, expenditure, payroll, conversion, general ledger, etc.) in an accounting information system	✓	
b) Identifies appropriate source documents for determining resource consumption by activities (such as purchase of materials, use of labour, maintenance of equipment, and other overhead activities) and describes the flow of documents in costing systems	✓	
c) Identifies cost elements obtainable from various source documents and accounts	✓	
d) Describes the flow of costs through the subsidiary ledgers and general ledger t-accounts in costing systems	✓	
e) Understands the differences in information system requirements for an ABC system versus traditional job costing and process costing systems	✓	
f) Describes the components comprising an ABC relational data base	✓	
g) Understands and applies a variety of tools for systems documentation and analysis (e.g. document flow diagrams, process flow diagrams, process flowcharts, data flow diagrams, system flowcharts, etc.)	✓	

F3.2 Revenue Management

Managing the revenue stream, using internal and external sources of information, in order to achieve the organization's chosen value proposition.

	R/U	A/A
3.2.1 <i>Identifies and describes the value proposition for a given organization</i>		
3.2.1.1 Identifies the positioning of the organization's products/services within the product life cycle (see also F1.2.5)		
a) Describes the value proposition and identifies the products and services integral to the value proposition for a given organization	✓	
b) Describes the dimensions of the product life cycle and explains the characteristics of the various stages of the life cycle	✓	
c) Understands how products and services can be managed through the product life cycle in both domestic and international markets	✓	
3.2.1.2 Identifies the organization's internal strengths and weaknesses and its external opportunities and threats (i.e. SWOT analysis) with respect to the value proposition (see also F1.2)		
a) Identifies the internal strengths and weaknesses of a given organization (leadership, resources, people, techniques/methods/practices, technology, processes, branding, etc.)		✓

	R/U	A/A
b) Identifies the external opportunities and threats of a given organization (current and potential customers/markets, technology, cost structure, resources, suppliers, environmental forces, competition, industry trends, international trade, etc.)		✓
c) Analyzes the business models of rivals to identify the sources of their advantages (e.g. cost, differentiation, capabilities, culture, etc.)		✓
d) Assesses various market-product strategies (e.g. market penetration, product development, market development, diversification, etc.) for a given organization		✓
3.2.1.3 Explains the need to manage intangible assets (e.g. knowledge assets, intellectual property, etc.)		
a) Describes the concept of an intangible asset	✓	
b) Identifies different types of intangible assets of a organization given a description of its business model and business practices (e.g. knowledge assets, patents, intellectual property)	✓	
c) Explains the relationship between an organization's value proposition and management of its intangible assets	✓	
3.2.1.4 Identifies a profitable product mix consistent with the value proposition		
a) Describes the product mix of an organization in terms of the relevant dimensions (e.g. depth, breadth, consistency)	✓	
b) Describes various product-mix strategies (e.g. product positioning, product line extension, product mix extension, trading up, trading down, product alteration, product-mix contraction)	✓	
c) Computes product line sales and profits <ul style="list-style-type: none"> • Performs a contribution margin analysis in a multi-product setting to determine the appropriate product mix • Applies linear programming analysis to determine the most profitable product mix 		✓
		✓
3.2.1.5 Explains distribution and supply chain management		
a) Describes the components of an organization's distribution and supply chain and explains the strategic and operational objectives of distribution and supply chain management (e.g. end customer satisfaction, efficiency, flexibility, agility, reliability, etc.)	✓	
b) Explains the internal and external factors that can influence the behaviour of the supply chain	✓	
c) Describes and understands the role of the various activities pertaining to distribution and supply chain management (e.g. customer order management, purchasing, supplier management, physical distribution management, inventory management, quality control, aggregate planning, logistics management, materials management, scheduling, etc.)	✓	
d) Explains the importance of matching the appropriate production process to the product in terms of aligning operations and corporate strategies	✓	

	R/U	A/A
e) Explains the importance of lean (just-in-time) production and service systems	✓	
f) Explains the issues and factors relevant for establishing and maintaining sound supplier relationships and understands the various types of supplier relationships (e.g. partnerships, vertical integration, long- and short-term market relationships, etc.)	✓	
g) Explains the issues and factors relevant for establishing and maintaining sound relationships with distributors and understands the various types of distribution channels (e.g. direct, wholesale, retail, internet, etc.)	✓	
h) Understands and applies various models and systems for managing inventories (e.g. EOQ, reorder point, MRP, JIT, etc.)	✓	✓
3.2.1.6 Describes innovative ways to improve the value proposition (e.g. new product development)		
a) Describes the stages in the new product/service development processes (e.g. idea generation/R&D, screening/evaluation, business analysis, design, market testing, commercialization, etc.)	✓	
b) Understands the new-product adoption process and innovation characteristics affecting the adoption rate	✓	
c) Understands how the marketing function can be used to improve the value proposition for a given organization	✓	
d) Describes the impact of appropriate strategic cost management initiatives (e.g. target costing, lifecycle costing) on improvements to the value proposition	✓	✓
3.2.2 <i>Identifies the information requirements for decision making with respect to revenue management in a given organization</i>		
3.2.2.1 Prepares profitability reports by product, division, geographic location, etc. (see also F1.2.1.3, F3.1.4, and F3.2.1.4)		
a) Understands and applies revenue allocation methods (e.g. stand alone, incremental, etc.) to sales of bundled products/services for a given organization	✓	✓
b) Prepares profitability reports for appropriately defined segments for a given organization, (e.g. product, division, geographic location, demographic, gender, etc.)		✓
c) Prepares a customer profitability analysis for a given organization		✓
3.2.2.2 Describes the information requirements for market analysis with respect to customer/client/member demand, buying patterns, market trends, etc.		
a) Describes and understands the advantages and disadvantages of various techniques for analyzing markets and forecasting demand (e.g. times series methods, linear regression, Delphi method, customer surveys)	✓	
b) Identifies the elements of a good forecast and the major factors to consider when selecting and evaluating a forecasting technique	✓	
c) Describes various methods of conducting market research and explains the advantages of each	✓	

	R/U	A/A
3.2.2.3 Identifies key success factors (KSFs) for revenue generation		
a) Understands the importance of customer value, customer relationships, strategic planning, and marketing for successful revenue generation	✓	
b) Explains the concept of the marketing mix and its key elements (product, price, promotion, place), and understands how to manage these elements to achieve an effecting marketing program	✓	
c) Understands the unique elements of services and the special nature of the marketing mix for services	✓	
d) Explains the role of promotion and advertising in revenue generation	✓	
e) Understands brands and the branding decision	✓	
f) Explains the importance of packaging and labelling in creating customer value	✓	
g) Explains the importance of warranties in generating revenues	✓	
3.2.3 <i>Calculates domestic and international prices for a given organization using various pricing strategies (e.g. value-based pricing, cost-plus pricing, reverse engineering, etc.)</i>		
a) Describes various long- and short-term pricing objectives and the factors affecting the choice of a pricing objective (e.g. survival, revenue maximization, sales growth, market share, break-even, social responsibility, etc.)	✓	
b) Identifies pricing constraints (e.g. stage in the product life cycle, demand, single product vs. product line, marketing and production costs, type of competitive markets, competitors' prices, sealed bid situations)	✓	
c) Understands the sensitivity of demand to price changes (i.e. the demand curve) and describes the factors that affect demand for a product or service (consumer tastes, consumer income, price and availability of substitute and complementary products, price elasticity of demand, potential reactions of rivals, marginal costs, shared costs, etc.)	✓	
d) Describes and applies various demand-oriented methods of pricing (e.g. value-based, skimming, penetration, prestige, price lining, target, bundle, yield management, peak-load)	✓	✓
e) Describes and applies various cost-oriented methods of pricing (e.g. standard markup, cost-plus, experience curve)	✓	✓
f) Describes and applies various profit-oriented methods of pricing (e.g. target profit, target return-on sales, target return-on-investment)	✓	✓
g) Describes and applies various competition-oriented methods of pricing (e.g. customary, market, above or below market, loss-leader)	✓	✓
h) Describes and applies a reverse engineering pricing strategy	✓	✓
i) Describes and applies adjustments to list or quoted prices (e.g. discounts, allowances, geographical adjustments, special orders)	✓	✓
j) Understands the legal and regulatory aspects of pricing (e.g. price fixing, price discrimination, deceptive pricing, predatory pricing)	✓	

	R/U	A/A
3.2.4 <i>Identifies and describes the ways in which information and information technology (IT) can become valuable resources for a given organization</i>		
3.2.4.1 Identifies key performance indicators for IT		
a) Describes the characteristics of various types of information systems (e.g. transaction processing, management reporting, decision support, etc.) in terms of inputs, processing, outputs, users, and uses of output	✓	
b) Describes the difference between accounting information systems and management information systems	✓	
c) Describes the role of information systems in managing the supply chain	✓	
d) Describes the concept and role of data warehousing	✓	
e) Explains the alignment/integration of information systems and key performance indicators for IT with business objectives and success factors, with respect to technology assessment, capacity planning, allocation of resources, management of technology diffusion, etc. in particular business settings	✓	✓
f) Explains the managerial tasks and practices pertaining to systems acquisition, development, analysis, implementation, and post-implementation review	✓	
g) Describes the management accounting issues relating to computer operations, and the effects of computer based information systems on traditional control activities, such as transaction authorization, segregation of duties, access control, independent verification, etc.	✓	
h) Explains various methods of evaluating IT (e.g. NPV, cost-benefit analysis, ROI, business case approach, value analysis, total cost of ownership, benchmarking, balanced scorecard, etc.)	✓	
3.2.4.2 Describes the role of an enterprise resource planning (ERP) system		
a) Describes enterprise resource planning (ERP) and contrasts ERP systems with traditional information systems	✓	
b) Explains the role and objectives of ERP systems in terms of integrating business processes across organizational boundaries and functions	✓	
c) Identifies and explains the capabilities, benefits, and challenges of ERP systems facing an organization	✓	
3.2.4.3 Describes the role of a customer relationship management (CRM) system		
a) Describes role, objectives, and deliverables of customer relationship management (CRM) systems	✓	
b) Describes the types of CRM (e.g. operational, analytical, collaborative) and CRM applications (e.g. sales, marketing, customer service, customer-centric intelligence, online networking, etc.)	✓	
c) Identifies and explains the capabilities, benefits, and challenges of CRM systems facing an organization	✓	
3.2.4.4 Describes best practices and emerging issues in IT management (e.g. intelligence systems, e-commerce, enterprise systems)	✓	

F4 PERFORMANCE MEASUREMENT

The functional competency of *performance measurement* pertains to the ability to evaluate performance with respect to the organization's established strategy and targets, and formulate incentive and compensation plans that motivate employees to strive for the achievement of organizational targets.

Objectives:

The candidate is able to:

- *define* the attributes of and *formulate* a performance measurement and reporting system for a given organization;
- *identify* the attributes of an incentive and compensation system for a given organization;
- *understand* how individuals are motivated in the workplace; and
- *design* an incentive and compensation system for a given organization.

Disciplinary Domains:

The relevant disciplinary domains are primarily strategic management, management control systems, management accounting, operations management, and human resources.

Knowledge of **strategic management, management control systems and management accounting** is essential for translating a given organization's strategy into specific, measurable performance metrics. To attain a CS-1 level of competency for this category, a candidate must possess a thorough understanding of an organization's strategy, goals, and objectives and the key success factors that will allow an organization to achieve these. An understanding of the relationship between management accounting, management control and strategic management is important for enabling the effective interfacing between accounting, management and strategy personnel.

Designing effective performance measurement systems includes allocating performance responsibilities to various functional and business units (e.g. cost centres, profit centres, etc.). **Management accounting** provides an understanding of how dividing responsibilities and decentralization can create the need for a transfer-pricing system, and how different transfer prices can impact the performance of the unit and the behaviour of its managers under various organizational and individual performance measurement systems.

The field of **human resources** plays an important role in recruiting, training, and retaining employees who can successfully implement an organization's strategy. A key area within human resources is motivating employees by designing effective compensation and incentive systems. Candidates must understand how to use performance measures and incentives to motivate an organization's employees to undertake their duties in a manner that is consistent with the strategic plan and how to evaluate their performance.

E1 – Problem Solving and Decision Making:

The Entrance Examination will test the candidates' ability to not only identify and describe relevant concepts, but also to apply these concepts and to determine, analyze and decide between potential alternatives in the formulation and implementation of performance measurement, compensation and incentive systems.

F4.1 Organizational Performance Measurement

Measuring progress toward the achievement of strategic and operational goals by developing, implementing, and operating performance reporting systems.

	R/U	A/A
4.1.1 <i>Defines financial and non-financial performance measures for given organizations (profit-oriented, not-for-profit, and public sector) with respect to strategic and operational goals</i>		
4.1.1.1 Defines the various responsibility centres (cost, revenue, profit, investment) and describes the appropriateness of allocating performance responsibility to each centre		
a) Understands the primary responsibilities of the various types of responsibility centres in terms of activities, inputs, and outputs	✓	
b) Explains how responsibility centres improve employee accountability	✓	
c) Evaluates and recommends which type of responsibility centre to assign to different business units	✓	✓
d) Uses financial and non-financial measures (e.g. ROI, RI, quality indicators, employee and customer satisfaction surveys, etc.) to evaluate performance of responsibility centres	✓	✓
4.1.1.2 Explains the objectives, and applies the methods, of transfer pricing in domestic and international settings		
a) Explains why it is necessary to set transfer prices for transactions between responsibility centres and understands the objectives of a transfer price system	✓	
b) Defines and applies different transfer pricing systems (e.g. based on market price, variable cost, full cost, negotiation) and calculates the appropriate transfer price under each system	✓	✓
c) Recommends a transfer pricing system for a given situation in an organization, taking into account taxation and behavioural implications	✓	✓
4.1.1.3 Describes applicable methods of measuring organizational performance in relation to strategic goals, target markets and customers, competitive business strategies, growth strategies, and corporate and social responsibility		
a) Explains how the performance measurement system affects the success of strategy implementation	✓	
b) Understands that effective performance measures are aligned with strategic goals, key success factors, and the needs of stakeholders	✓	

	R/U	A/A
c) Identifies and understands the effects of various factors that require consideration in designing a performance measurement system for a given organization (e.g. short- and long-term objectives, internal and external forces, cause-and-effect relationships among performance measures, financial and non-financial factors, periodic comparisons and benchmarking, social capital, linking budgets to strategy, quality versus cost, manufacturing versus service operations, etc.)	✓	✓
d) Describes various organizational performance measurement systems, such as the Balanced Scorecard, the pillars of the Baldrige Award, and Six-Sigma	✓	✓
e) Determines appropriate performance measures and related performance targets for activities of a given organization (e.g. return on marketing activities, etc.)	✓	✓
f) Recognizes factors that improve the effectiveness of an organization's performance measurement system, such as setting SMART goals (i.e. specific, measurable, attainable, realistic, and tangible goals) and measures that are timely, precise, and objective	✓	✓
g) Describes potential problems with a given organization's performance measurement system (e.g. too many measures, wrong or out-of-date measures, employees build slack into the targets, measures are not balanced) and proposes corrective action	✓	✓
4.1.1.4 Describes applicable methods of measuring organizational performance in relation to internal operational goals set by the planning and budgeting function		
a) Understands how performance measurement systems cascade down from the corporate strategy level to the operational level	✓	
b) Determines appropriate performance measures and related performance targets for various operational units (e.g. cost, revenue, profit and investment centres, production, support, etc.) of a given organization	✓	✓
c) Calculates various performance measures (e.g. return on investment, residual income, variances, market share, profit margin, and quality control statistics) and identifies the merits and limitations of each in evaluating the performance of operational units and managers	✓	✓
d) Prepares and analyzes performance reports for various operational units of a given organization and recommends remedial actions when actual performance varies significantly from expected performance	✓	✓
4.1.1.5 Describes best practices and emerging issues in performance measurement in a given industry (e.g. strategy mapping, target setting, performance-based budgeting)	✓	

F4.2 Individual Performance Measurement

Using incentive and compensation systems to align individual and organizational goals.

	R/U	A/A
4.2.1 <i>Describes the incentive systems, human resource policies, and related issues for a given organization</i>		
4.2.1.1 Describes the incentive structures and related human resources issues, including behavioural implications		
a) Explains how a given organization’s incentive plan impacts employee motivation and goal congruence	✓	
b) Understands the characteristics of effective reward and incentive systems (e.g. clear, measurable and accepted objectives, rewards linked to desired behaviour and outcomes, measures clear and visible, prompt feedback, perceived to be fair and equitable, flexible, adapts to changing circumstances, targets are specific, achievable and challenging, etc.)	✓	
c) Understands various theories and practices pertaining to work motivation (e.g. intrinsic/extrinsic, equity theory, needs theory, expectancy theory, transformational change, attribution theory, personality types, job design, positive and negative reinforcement, feedback, culture, etc.) and how they are used in designing individual performance measurement systems	✓	✓
d) Identifies the benefits of various non-financial incentives and rewards (e.g. praise, recognition, peer feedback, promotion, increased autonomy, increased responsibilities, etc.)	✓	✓
e) Understands the benefits and shortcomings of basing compensation and rewards on individual, work team, business unit or company performance	✓	✓
f) Assesses the effectiveness of a given organization’s incentive plan in achieving its goals, recognizes potential problems (e.g. agency problems, measures and targets not congruent with strategy, short-terms measures versus long-term goals, basing incentives on performing assigned functions instead of on achieving results, incentives not valued by employees, incentives based on outcomes that employee does not control or influence, etc.) and proposes corrective actions	✓	✓
g) Outlines the role of the board of directors in determining the compensation of a given organization’s CEO	✓	
4.2.1.2 Describes issues of compliance/non-compliance with legal and regulatory requirements		
a) Explains how legal and regulatory requirements (e.g., Employment Standards Act, Human Rights Legislation, Trade Union Legislation, and tax laws, disclosure rules, valuation of stock option grants) impact a given organization’s incentive plans	✓	

	R/U	A/A
4.2.1.3 Describes the role of human resource policies in the design of incentive systems		
a) Understands how human resource policies (e.g. training and development, promotion, employment equity, prevention of discrimination and harassment, health, safety and environment, benefits and pensions, etc.) complement a given organization's incentive system	✓	
4.2.1.4 Identifies ethical issues related to incentive and compensation systems		
a) Explains how incentive systems can encourage employees to behave ethically or to violate a given organization's code of business conduct and ethics	✓	✓
b) Understands how ethical values are affected by cultural differences	✓	
c) Explains potential drawbacks of team-based incentive systems (e.g. free-riding) and how they can be mitigated	✓	✓
d) Understands the ethics of fair pay (relation between corporate executive and shop floor worker) and explains the importance of pay equity between similar job positions and within industries	✓	✓
4.2.1.5 Describes the role of the competitive environment in employee recruitment and retention		
a) Uses industry compensation survey data to monitor if a given organization's incentive and compensation system is competitive	✓	✓
b) Understands the various monetary and non-monetary incentives and compensation that attract and retain employees (e.g. competitive pay, profit sharing, flexibility, training, promotion, child care facilities, job sharing, status symbols, permission to work from home, vacation time, travel opportunities, perks, etc.) and proposes a total compensation package for given competitive market conditions	✓	✓
c) Assesses the effectiveness of a given organization's incentive plan in achieving attracting and retaining qualified employees, recognizes potential problems and proposes corrective actions	✓	✓
4.2.2 <i>Describes the methods of compensation (e.g. cash, stock and options), corresponding tax implications, and related factors for a given organization</i>		
a) Describes various methods of compensation (e.g. bonus pool, gain sharing, stock options, profit sharing, employee stock ownership, performance shares, etc.)	✓	✓
b) Understands and evaluates the benefits and shortcomings of various methods of compensation, including those related to tax implications for the organization and its employees (e.g. dividend versus salary for owner-managers)	✓	✓
c) Discusses the benefits of deferring a portion of the incentive payout into the future	✓	

F5 FINANCIAL MANAGEMENT

The focus of this part of the Competency Map is on the ability of the strategic finance professional to set financial objectives and manage financial resources and associated risks.

Objectives:

The candidate is able to

- *describe* the process of establishing financial objectives and the principles of managing financial resources in a given organization;
- *apply* methods for evaluating and managing investments in assets and capital projects;
- *define and design* financial risk strategies for a given organization; and
- *explain* how taxes affect business decisions and *apply* tax rules for calculating income for tax purposes and taxes payable for a given organization.

Disciplinary Domains:

The relevant disciplinary domains are primarily corporate finance, management accounting, financial accounting, and taxation. Also relevant is the domain of strategic management, which provides the basis for understanding the overall business and strategic context in which the organization operates and functions.

Financial resource management involves three broad classes of decisions: 1) the long-term investment decision, which primarily concerns the asset side of the balance sheet and focuses on determining how to allocate scarce financial resources among competing uses; 2) the long-term financing decision, which primarily concerns the liabilities and equity side of the balance sheet and focuses on how the organization should raise the capital needed to fund desirable business projects; and 3) the short-term investment, operating, and financing decisions, which pertain to net working capital and the income statement and focus on maintaining adequate cash flows to support the efficient and effective operations of the organization. **Corporate finance** covers the theories, methods, and models used by organizations to make these decisions.

The management accountant often plays an important role in facilitating financial decision making. An understanding of many of the cost and revenue management tools and techniques covered in **management accounting**, such as budgeting, sensitivity analysis, inventory management, capital budgeting, and decision making under uncertainty, is important when making financing and investment decisions.

A strong foundation in **financial accounting** principles and practices is necessary to achieve a CS-1 level of competency for this category. An understanding of the financial statements and other financial information about an organization is essential to enable decision makers to analyze the financial position of the organization, evaluate its financial strengths and weaknesses, assess the risks of potential investments, and determine the effects of investment and financial decisions on capital structure and shareholder wealth.

An important consideration in making investment and financial decisions is the effects of taxes on relevant items, such as cash flows, asset acquisitions and dispositions, profitability of investment opportunities, dividends, share prices, firm value, capital structure, and shareholder

wealth. To attain a CS-1 level of competency for this category, an understanding of **taxation** principles, rules, and special incentives is essential.

E1 – Problem Solving and Decision Making:

The Entrance Examination will test the candidates’ ability to not only identify and describe relevant concepts, but also their ability to apply these concepts and to determine, analyze and decide between potential alternatives in the formulation and implementation of investment and financing strategies that improve organizational performance and shareholder wealth.

Changes in Tax Legislation:

In cases where tax legislation has changed within one year of the Entrance Examination, candidates may respond according to either the original or the revised legislation. However, for changes more than one year prior to the examination, candidates are expected to respond according to the revised legislation.

F5.1 Financial Resource Management

Setting financial objectives and managing financial resources

	R/U	A/A
5.1.1 <i>Describes the principles that are appropriate for a given organization to apply in setting its financial objectives</i>		
5.1.1.1 Describes and applies various methods of valuing assets (e.g. time value of money, cost of capital, etc.) and evaluating capital projects (e.g. capital budgeting, NPV, IRR, buy versus lease, etc.)		
a) Understands the scope of financial management		
• Describes the primary activities, duties and skills of financial managers	✓	
• Explains the primary goals of the finance function	✓	
• Identifies and describes the potentially conflicting goals of financial management among stakeholders (e.g. managers, shareholders, debt-holders, society), and understands the agency problem	✓	
b) Time value of money		
• Explains and applies the concept of time value of money and compounding of interest	✓	✓
• Calculates future and/or present values of single amounts, annuities, and perpetuities under various conditions (e.g. even, uneven and growing cash flow streams, constant and changing interest rates, etc)		✓
• Differentiates and calculates effective annual rate (EAR) and annual percentage rate (APR) of interest	✓	✓
• Differentiates nominal and real rates	✓	
• Calculates the impact of inflation on the time value of money		✓
c) Cost of capital		
• Explains the concept of cost of capital and its relevance for valuing risky assets	✓	

	R/U	A/A
• Calculates the after-tax cost of debt and cost of preferred equity	✓	✓
• Calculates the cost of common equity using the dividend growth model and the capital asset pricing model	✓	✓
• Explains and calculates the weighted average cost of capital (WACC)	✓	✓
• Understands the uses of WACC and how it is applied in financing and investment decision-making	✓	
• Understands the impact of flotation costs on WACC	✓	
d) Valuing stocks and bonds		
• Describes the yield curve and discusses the theories explaining its shape	✓	
• Calculates the current value (price) of bonds, preferred shares, and common shares based on the future benefits (cash flows) given a discount rate		✓
• Calculates the value (price) of a stock according to a variety of approaches (e.g. dividend growth models, book value, liquidation value, price/earnings multiples, present value of growth opportunities (PVGO), etc.)		✓
e) Capital budgeting		
• Explains the key motives for making capital expenditures (e.g. expansion, replacement, renewal, etc.) and the steps in the capital budgeting process	✓	
• Defines and explains the use of various methods of project evaluation (e.g. net present value, payback period, internal rate of return (IRR), profitability index (i.e. benefit/cost ratio), etc.)		✓
• Explains the concept of incremental cash flows, sunk costs, terminal cash flows, and opportunity costs	✓	
• Identifies, defines and computes the relevant cash flows of a capital project (e.g. capital outlay, opportunity costs, after-tax operating cash flows, cash flows from ownership and disposal of depreciable property such as tax shields from CCA and salvage, cash flows from investment in and recovery of working capital, etc.)	✓	✓
• Determines relevant cash flows of a project from a set of forecasted financial statements (income statement, multi-year balance sheets)		✓
• Describes and explains the selection of the appropriate discount rate to use for net present value (NPV) calculations	✓	
• Calculates the (NPV) of a project		✓
• Calculates the payback period of a project		✓
• Calculates the internal rate of return (IRR) of a project		✓
• Calculates the profitability index of a project		✓
• Describes and explains the pitfalls of using the IRR and payback methods for project evaluation and selection	✓	
• Applies the various capital budgeting methods to various situations (e.g. when projects are/are not mutually exclusive and/or independent, when projects have different durations, when one asset is replacing another, etc.)	✓	✓
• Explains and applies techniques for selecting among capital projects when faced with limited funds (e.g. capital rationing, ranking approach, etc.)	✓	✓

	R/U	A/A
<ul style="list-style-type: none"> Explains alternative approaches to dealing with risk in evaluating capital projects (e.g. sensitivity analysis, adjust the discount rate, etc.) 	✓	
<ul style="list-style-type: none"> Explains and considers the impact of various factors (e.g. political risk, discount rate, foreign exchange, etc.) in international capital budgeting decisions 	✓	
f) Buy versus lease		
<ul style="list-style-type: none"> Identifies, explains and assesses the reasons for leasing 	✓	
<ul style="list-style-type: none"> Identifies and describes the various types of leases (e.g. operating, financial/capital, direct, sale-leaseback, leveraged) 	✓	
<ul style="list-style-type: none"> Applies the NPV method to a lease versus buy situation from the perspective of both the lessee and lessor, and interprets the results 		✓
5.1.1.2 Describes the financial considerations involved in mergers and acquisitions (see also F1.2.6.2)		
a) Identifies and describes the basic legal forms of acquisitions (e.g. merger, consolidation, acquisition of stock, acquisition of assets), and the classifications of acquisitions (e.g. horizontal, vertical, conglomerate)	✓	
b) Differentiates takeovers and acquisitions, describes the different ways in which a takeover can be achieved, and explains the defensive tactics used to resist a takeover	✓	
c) Explains the motives for mergers and acquisitions (e.g., synergy, revenue enhancement, cost reduction, tax considerations, etc.)	✓	
d) Differentiates between tax-free and taxable acquisitions and explains conditions for determining the tax status of the acquisitions	✓	
e) Calculates the value of the target company to the acquiring company, including the value of synergies		✓
f) Explains and calculates the impact of acquisitions on earnings per share	✓	✓
g) Explains the accounting principles underlying the accounting treatment of mergers and business combinations (see also F6.1.8)	✓	
5.1.1.3 Describes the methods of business valuation		
a) Identifies and explains important factors underlying business valuations (e.g. assessing risk and growth potential, earnings sustainability, seller versus buyer perspective, reliability of historical information, etc.)	✓	
b) Calculates the worth of a business using a variety of valuation methods:		
<ul style="list-style-type: none"> Asset approaches (e.g. net book value, net realizable value) 		✓
<ul style="list-style-type: none"> Earnings approaches (e.g. earnings multiples) 		✓
<ul style="list-style-type: none"> Cash-flow-based approaches (e.g. net present value) 		✓

F5.2 Financial Risk Management

Analyzing financial risk to maximize opportunities and mitigate threats by assessing financial risk in the external environment, identifying and evaluating operational funding requirements, and developing and recommending strategic financial plans and forecasts.

	R/U	A/A
5.2.1 <i>Describes and assesses the financial risks for a given organization with respect to the following: sources of financing, forms of business organization, type of investment, and distribution of profits</i>		
5.2.1.1 Sources of financing (e.g. public versus private, debt versus equity, etc.)		
a) Describes the purpose and features (e.g. function, cash flow, risks, investment characteristics and provisions, etc.) of various sources of short- and long-term financing and financial instruments (e.g. bank loans, money market instruments, working capital, venture capital, common stock, preferred stock, notes, debentures, bonds, leases, derivative securities such as warrants and options, convertible securities, rights offerings, etc.)	✓	
b) Compares the features and relative merits of various sources of financing and financial instruments available to a given organization and calculates their effective costs and market values	✓	✓
c) Describes shareholder and creditor rights and determines the return/yield of various types of financial instruments	✓	✓
d) Explains bond ratings, describes the various types of bonds and bond provisions, and explains related financial risk implications	✓	
e) Describes the various classes and features of stock and explains related financial risk implications	✓	
f) Explains the types of financial risk exposure (e.g. transaction, economic, interest rate, exchange rate, etc.) and explains the use of various methods of hedging to manage financial risk (e.g. forwards, futures, options, swaps, etc.)	✓	
5.2.1.2 Forms of business organization (e.g. corporation, sole proprietorship, partnership, joint venture and income trust)		
a) Describes the various forms of business organization	✓	
b) Explains, assesses, and differentiates between the financial risks associated with the various forms of business organization	✓	
5.2.1.3 Type of investment (e.g. direct investment, outsourcing, strategic alliance, merger, acquisition, etc.)		
a) Describes and assesses the financial risks associated with various types of investment, including international aspects	✓	
5.2.1.4 Distribution of profits (e.g. cash dividends, stock repurchase, stock split and stock dividends)		
a) Describes the criteria used to determine whether profits should be reinvested or paid out as dividends	✓	
b) Describes how various methods of distributing profits affect the financial risk of a given organization	✓	

	R/U	A/A
<p>5.2.2 <i>Describes appropriate methods of managing investment portfolios and financial instruments for a given organization, including the evaluation of portfolio risk</i></p> <p>a) Describes and differentiates the various financial markets and institutions (e.g. primary and secondary markets, money and capital markets, international financial markets, financial intermediaries, etc.)</p> <p>b) Explains the concept of market efficiency and its relevance to pricing of an investment in widely and thinly traded assets and securities</p> <p>c) Describes the concepts of and relationship between return on investment and risk</p> <p>d) Describes and calculates the expected return of an investment and a portfolio of investments using various methods (e.g. dollar amount, percentage, average, etc.)</p> <p>e) Identifies and explains the common approaches and statistical measures used in finance to assess and measure asset and portfolio risk (e.g. sensitivity analysis, probability distributions, variance, standard deviation, covariance, correlation, beta, etc.)</p> <p>f) Explains how financial markets value risk and how investors trade off risk against expected returns</p> <p>g) Explains the concept of diversification and how it relates to portfolio risk</p> <p>h) Describes and differentiates systematic and unsystematic risk</p> <p>i) Explains the concepts, uses, and importance of the security market line, market portfolio, market risk premium, risk-free rate, beta, and the capital asset pricing model (CAPM)</p> <p>j) Calculates the expected return of a security using the CAPM</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p></p> <p></p> <p></p> <p>✓</p> <p></p> <p></p> <p></p> <p></p> <p></p> <p>✓</p>
<p>5.2.3 <i>Describes the impact of working capital management, financial forecasting and planning, and foreign exchange on a given organization's treasury function</i></p> <p>a) Explains, describes and applies principles of short and intermediate term financial planning and management</p> <ul style="list-style-type: none"> • Describes working capital management and explains its importance for the financial management function of the organization • Explains the relationship between liquidity and return • Explains and applies the principles of and techniques used for managing cash, accounts receivable, inventory, accounts payable, short-term loans, and other components of working capital, in both domestic and international settings <p>b) Explains and applies principles of financial forecasting and planning</p> <ul style="list-style-type: none"> • Understand the financial planning process (e.g. forecasting future profitability, the need for cash, and the need for financing, etc.) and applies cash flow planning principles to forecast cash flows and plan long-term and short-term sources and uses of funds • Develops pro-forma financial statements using various approaches (e.g. percentage of sales, judgemental, growth, etc.) and understands the benefits and weaknesses of using these approaches <p>c) Describes the impact of foreign exchange on financial management</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p></p> <p></p> <p>✓</p> <p>✓</p> <p>✓</p>

	R/U	A/A
5.2.5 <i>Describes the tax consequences of finance and investment decisions for a given organization</i>		
a) Describes and determines the tax implications and tax treatment of alternative methods of financing (e.g. debt, common and preferred equity, and leases), and explains how various tax variables affect business decisions (e.g. capital budgeting, capital structure, mergers & acquisitions, dividend policy, foreign investment, risk management, etc.)	✓	✓
b) Describes the tax principles pertaining to the following: entities subject to taxation, residency, types of income, filing and paying taxes, and international tax treaties	✓	
c) Describes the principles of tax planning and income deferral	✓	
d) Explains the differences between business income, property income, capital gains, accounting income, income for tax purposes, and taxable income	✓	
e) Explains and applies the taxation rules for calculating business income and net income for tax purposes for a given organization, including adjustments to accounting net income (e.g. income tax expense, non-deductible expenses, reserves, depreciation vs. CCA, charitable donations and other accounting expenses that are not included in net income for tax purposes but are deducted in calculating taxable income, accounting vs. taxable capital gains and losses, holdbacks, exempt income, accruals, etc.)	✓	✓
f) Explains and applies the taxation rules pertaining to capital cost allowance, acquisitions and dispositions of depreciable capital property (including recapture and terminal loss), and cumulative eligible capital for a given organization	✓	✓
g) Explains and applies the taxation rules for calculating interest, dividend and other property income for a given organization	✓	✓
h) Explains and applies the taxation rules pertaining to capital gains and losses for a given organization and discusses tax planning principles related to capital gains and losses	✓	✓
i) Explains and applies the taxation rules pertaining to the calculation of taxable income for a given organization (e.g. charitable donations and other deductible gifts, loss carry-overs, taxable dividends, etc.)	✓	✓
j) Explains and applies the taxation rules pertaining to the calculation of Part I tax for a given organization (e.g. corporate surtax, federal tax abatement, etc.)	✓	✓
k) Explains and applies the small business deduction and the rules governing associated companies for a given organization	✓	✓
l) Explains and applies the special incentives and credits pertaining to the calculation of taxes payable for a corporation (e.g. manufacturing and processing profits deduction, foreign income tax credit, investment tax credit, SR&ED incentives, etc.)	✓	✓
m) Explains and demonstrates the integration of the corporate and personal tax systems for business and investment income, including the effects of the dividend gross up and dividend tax credit	✓	✓
n) Explains and applies the taxation rules pertaining to special refundable taxes (e.g. refundable portion of Part 1 tax, refundable dividend on hand, dividend refund, refundable investment tax credit, etc.)	✓	✓

- o) Explains and applies the taxation rules pertaining to the calculation of total taxes payable for a given organization (e.g. Parts I, I.3, IV and IV.1 taxes, federal and provincial taxes, etc.)

R/U	A/A
✓	✓

F6 FINANCIAL REPORTING

The functional competency of financial reporting pertains to the ability to understand, produce, and analyze the information disclosed in an organization's financial statements. Financial reporting focuses on the needs of external parties such as shareholders, creditors, and regulatory agencies.

Objectives:

The candidate is able to

- *describe* the conceptual framework that forms the basis of financial accounting;
- *demonstrate* an understanding of accounting principles and other reporting requirements;
- *describe* and *understand* the components of financial statements;
- *prepare* a set of financial statements in accordance with accounting principles for a given organization;
- *define* and *apply* methods of financial statement analysis for a given organization; and
- *evaluate* and *interpret* the results of financial statement analyses for decision making purposes.

Disciplinary Domains:

The relevant disciplinary domains are primarily intermediate and advanced financial accounting, and corporate finance. Other disciplinary domains, such as management accounting and strategic management, are also relevant in that they provide the basis for understanding the overall business and strategic context in which an organization operates and functions.

The fundamental purpose of accounting is to provide information for decision making. Management accounting is oriented towards providing information to support managers and others inside the organization in planning, controlling and evaluating performance. Financial accounting, on the other hand, focuses on the needs of external users (investors, lenders, suppliers, employees, customers, government and general public). The scope of financial accounting encompasses the recognition, measurement, and disclosure of information in an organization's financial statements, as well as the analysis of that information. The main challenge for the accounting professional is to ensure that the information accurately reflects the consequences of the operating, investing, and financing decisions made by the organization's management. The recording and disclosure of information is governed or influenced by financial accounting standards, practice, regulatory bodies, and the nature of the entity's environment and activities. To understand the financial information of an organization and to attain a CS-1 level of competency for this category, a thorough understanding of **intermediate and advanced financial accounting** principles and practices is essential.

While knowledge of financial accounting is essential for understanding financial information about the organization, knowledge of **corporate finance** is required for understanding the financial objectives of the organization with regard to managing its financial resources. As previously noted for the F5 competency, the management accountant plays an important role in facilitating financial decision making, which involves three broad classes of decisions: 1) long-term investment, 2) long-term financing, and 3) short-term investment, operating and financing. The transactions that these financial decisions give rise to must be accounted for and the

effects on the financial position of the entity must be recognized, recorded, and reported. Corporate finance covers the analysis of the effect of these decisions on the financial position of an organization, whereas financial accounting covers the accounting of the related transactions.

E1 – Problem Solving and Decision Making:

The Entrance Examination will test the candidates’ ability to not only identify and describe relevant accounting concepts and reporting requirements, but also their ability to apply these concepts and requirements in producing financial information and to analyze the financial information to facilitate decision making.

For 2011 Entrance Exams

Candidates will be expected to apply accounting standards (within the boundaries laid out by the competencies listed below) in accordance with either International Financial Reporting Standards (IFRS) or Accounting Standards for Private Enterprise (ASPE) as of January 1, 2010.

Financial reporting questions on the Entrance Exam will indicate, as necessary, which set of standards the candidate should apply.

Candidates will **not** be expected to have knowledge of exposure drafts, International Financial Reporting Interpretations Committee updates (IFRICs) nor Standing Interpretations Committee updates (SICs).

By reviewing the 2011 Competency Map, the IFRS Bridging Manual and the 2011 Sample Entrance Exam candidates will gain an understanding of the scope of knowledge expected for the 2011 Entrance Exams.

F6.1 Financial Statement Preparation

Producing accurate financial statements in compliance with accounting principles and regulatory requirements by efficiently managing and adapting financial accounting systems in response to current and future developments.

	R/U	A/A
6.1.1 <i>Understands and describes the accounting cycle</i>		
a) Describes and performs the steps comprising the accounting cycle (e.g. analyze transactions and events, journalization, posting, trial balance, adjusting entries, closing and reversing entries)	✓	✓
6.1.2 <i>Explains the conceptual framework that forms the theoretical basis for financial accounting</i>		
a) Explains the elements of financial statements (e.g. assets, liabilities, equity, income, expenses and capital maintenance adjustments) and the various objectives of financial reporting (e.g. communicate information used by a wide range of users to make economic decisions and to show the results of management stewardship)	✓	

	R/U	A/A
b) Explains the factors that are taken into account in exercising professional and ethical judgement in selecting accounting policies, making accounting estimates, and preparing accounting information (e.g. user needs, motivations of managers, operations of organization, reporting constraints, complexity, etc.)	✓	
c) Explains the desired qualitative characteristics of accounting information (e.g. understandability, relevance, reliability and comparability) and the need to make tradeoffs between them	✓	
d) Explains the basic assumptions underlying financial reporting (e.g. going concern and accrual basis)	✓	
e) Explains the accounting principles and methods used for accounting recognition and measurement (e.g. historical cost, current cost, realizable value, fair value and present value)	✓	
f) Understands who the users of financial statements are and their broad needs	✓	
6.1.3 <i>Describes the role of revenue recognition and matching in the measurement of income</i>		
a) Explains and applies the criteria for revenue recognition for the sale of goods, the rendering of services and interest, royalties and dividends	✓	✓
b) Describes the percentage of completion contract method of accounting for long-term contracts, the types of contracts (fixed price and cost plus) and calculates income using these methods	✓	✓
c) Explains and applies the methods of accounting for other types of revenue and their associated expenses (e.g. service revenues, consignment sales, interest, royalties, dividends, franchise revenues, sales and leaseback, instalment sales, barter and non-monetary transactions, and dispositions of assets other than inventory)	✓	✓
d) Explains and applies the principles underlying the recognition of gains/losses, including contingencies, and discuss the implications of applying revenue recognition policies for determining cash flows	✓	✓
e) Describes issues pertaining to the disclosure of revenue recognition policies on the financial statements	✓	
f) Explains and applies the matching and the definitional approaches to expense recognition	✓	✓
g) Explains the general expense recognition issues pertaining to cost of goods sold (e.g. cost flow assumption and the effect of changing the assumption) and depreciation of assets (e.g. depreciation methods)	✓	
h) Explains and applies the concept of and criteria for deferred costs/charges	✓	✓
6.1.4 <i>Prepares the following financial statements (other than consolidated statements) for a given organization in accordance with accounting standards</i>		
6.1.4.1 Balance Sheet/Statement of Financial Position		
a) Explains the purpose and limitations of the balance sheet/statement of financial position	✓	

	R/U	A/A
b) Describes the various items, how they are classified on and defined for the balance sheet/statement of financial position and explains the role of each	✓	
c) Explains and applies the accounting aspects, disclosure requirements and valuation of balance sheet items, including those pertaining to current, non-current, held-for-sale, long-term, tangible and intangible assets, liabilities, contingent liabilities, provisions and equity	✓	✓
d) Prepares an annual and interim balance sheet/statement of financial position and supporting schedules		✓
6.1.4.2 Income Statement/Statement of Comprehensive Income		
a) Explains the uses and limitations of the income statement and distinguishes accounting and economic income	✓	
b) Describes comprehensive income, the alternative presentation formats for income statements, minimum disclosures and the associated elements and items	✓	
c) Explains and applies the accounting aspects and disclosure requirements of income statement items, including various irregular and special items (e.g. intraperiod tax allocation, restructuring charges, discontinued operations, changes in estimates, unrealized gains and losses, earnings per share)	✓	✓
d) Prepares an annual and interim income statement		✓
6.1.4.3 Cash Flow Statement		
a) Differentiates the concepts of cash and accruals, receipts and revenues, and disbursements and expenses	✓	
b) Explains the purpose, content, usefulness, classifications, and alternative approaches to presentation (direct and indirect) of cash flow statements	✓	
c) Explains and applies the accounting aspects and disclosure requirements of cash flow items, including operating, investing, and financing activities	✓	✓
d) Prepares an annual and interim statement of cash flows under the direct and indirect methods		✓
6.1.4.4 Statement of Changes in Shareholders' Equity		
a) Explains the purpose and components of the statement of shareholders' equity	✓	
b) Explains and applies the accounting aspects and disclosure requirements of shareholders' equity items (e.g. common shares, preferred shares, contributed surplus, retained earnings and accumulated other comprehensive income)	✓	✓
c) Prepares a statement of shareholders' equity		✓
6.1.5 <i>Describes the role of the Notes to Financial Statements</i>		
a) Describes the purpose, content, and classifications of the notes to financial statements	✓	

	R/U	A/A
b) Explains and applies the disclosure of various items in the notes to the annual and interim financial statements (e.g. accounting policies, future cash flows, alternative measurement bases for recognized and unrecognized amounts, financial instruments, segmented information, related party transactions, contingencies and subsequent events)	✓	✓
6.1.6 Explains the accounting treatment for the following specific items and transactions		
6.1.6.1 Current assets		
a) Explains the issues and applies the methods pertaining to acquiring, holding, disposing, measuring, valuing, recognizing, reporting, disposing of, disclosing, analyzing, and accounting for the following current assets:		
• Cash and equivalents	✓	✓
• Financial investments	✓	✓
• Fair value through Profit and Loss Investments	✓	✓
• Accounts receivable and allowance for doubtful accounts	✓	✓
• Notes and other receivables	✓	✓
• Inventories (including periodic versus perpetual systems; average cost, moving cost, and FIFO cost flow assumptions; and lower of cost or market, gross margin/profit, and retail inventory methods of valuation)	✓	✓
6.1.6.2 Long-term investments in bonds and shares		
a) Explains the issues and methods pertaining to acquiring, holding, disposing, measuring, valuing, recognizing, reporting, disclosing, analyzing, and accounting for long-term investments (including the cost, equity, consolidation, fair value, and effective interest methods)	✓	
b) Describes the classification and definitions of debt and equity investments (e.g. passive versus strategic, temporary versus long-term, Fair value through Profit and Loss, held-to-maturity, available-for-sale, investment in associates and joint venture)	✓	
c) Applies the cost, equity, fair value, and effective interest methods of accounting for investments, including the calculation and accounting of related premiums, discounts, realized and unrealized gains and losses, impairment losses, and treatment of transactions costs		✓
6.1.6.3 Property, plant and equipment		
a) Explains the issues and applies the methods pertaining to acquiring, depreciating/depleting, disposing, measuring, valuing, recognizing, reporting, disclosing, analyzing, and accounting for property, plant and equipment, including the following special situations:	✓	✓
• Lump sum purchase of a group of assets	✓	✓
• Self-constructed or donated assets, and assets acquired through government assistance	✓	✓
• Purchases in exchange of other non-monetary assets, debt or equity	✓	✓
• Post acquisition expenditures (e.g. maintenance, repairs, additions, improvements, replacements, rearrangement, reinstallation, etc.)	✓	✓

	R/U	A/A
<ul style="list-style-type: none"> • Alternative methods of depreciation and depletion 	✓	✓
b) Explains and applies the cost and revaluation models for property, plant and equipment	✓	✓
6.1.6.4 Leases		
a) Explains the issues and applies the methods pertaining to acquiring, amortizing, disposing, measuring, valuing, recognizing, reporting, disclosing, analyzing, and accounting for leases by the lessee and lessor, including the following:	✓	✓
<ul style="list-style-type: none"> • Advantages of leasing, including off-balance sheet financing 	✓	✓
<ul style="list-style-type: none"> • Criteria for lease classification 	✓	✓
<ul style="list-style-type: none"> • Accounting for finance/capital leases, operating leases and sale and leaseback situations by the lessee 	✓	✓
<ul style="list-style-type: none"> • Calculating the lease payment required for the lessor to earn a required return 	✓	✓
<ul style="list-style-type: none"> • Effects of residual values and bargain purchase option on lease accounting 	✓	✓
6.1.6.5 Pensions and other employee future benefits		
a) Describes the characteristics of defined benefit and defined contribution pension plans, and explains various pension variables (e.g. contributory, vested, registered)	✓	
b) Explains the issues and applies the methods pertaining to measuring, valuing, recognizing, reporting, disclosing, analyzing, and accounting for defined benefit and defined contribution pensions and other employee future benefits, including the following:	✓	✓
<ul style="list-style-type: none"> • Measurement of the Defined Benefit Obligation 	✓	✓
<ul style="list-style-type: none"> • Pension expense and its components, and accrued/deferred pension asset/liability 	✓	✓
<ul style="list-style-type: none"> • Defined benefit obligation and plan assets 	✓	✓
<ul style="list-style-type: none"> • Past service costs, actuarial gains and losses, and corridor depreciation 	✓	✓
<ul style="list-style-type: none"> • Post-retirement benefit plans (e.g. health care, prescription drugs, insurance, subsidized travel) 	✓	✓
6.1.6.6 Research and development (R&D) costs		
a) Differentiates research and development costs, and explains the criteria for capitalizing and amortizing development costs	✓	
b) Describes the criteria for capitalizing and amortizing development costs	✓	
c) Explains and applies the accounting treatment for research and development costs, including those pertaining to computer software, website development, exploration, and organization development	✓	✓
6.1.6.7 Non-monetary and related party transactions		
a) Explains and applies the accounting treatment for non-monetary transactions including share-based payments (see also F6.1.3 and F6.1.6.3)	✓	✓
b) Explains the accounting issues and applies the accounting treatment for related party transactions	✓	✓

	R/U	A/A
6.1.6.8 Earnings per share (EPS)		
a) Explains the issues and applies the methods pertaining to recognizing, reporting, disclosing, analyzing, calculating, and using earnings per share, including the following:	✓	✓
• Weighted average common shares	✓	✓
• Simple and complex capital structures	✓	✓
• Basic and diluted earnings per share	✓	✓
• Complicating factors, such as issuing or exercising convertible securities and options during the year	✓	✓
6.1.7 <i>Explains the accounting treatment for public and private organizations of the following specific items and transactions</i>		
6.1.7.1 Testing of goodwill and long-lived assets for impairment		
a) Explains the issues and applies the rules pertaining to testing, measuring, recognizing, reporting, disclosing, analyzing, and accounting for revaluation, impairment and subsequent recovery of the value of the following:		
• Property, plant and equipment	✓	✓
• Long-term investments	✓	✓
• Debt	✓	✓
6.1.7.2 Foreign currency transactions (see also F5.2.3)		
a) Explains the issues and implications, and applies the methods pertaining to calculating, recognizing, reporting, disclosing, analyzing, and accounting for foreign currency transactions and foreign currency-denominated financial assets and liabilities (including foreign currency balances, and disposition of foreign currency gains and losses)	✓	✓
6.1.7.3 Translation of foreign currency financial statements		
a) Explains various types of foreign currency/exchange risk exposure for an organization from the accounting perspective and the economic perspective	✓	
b) Distinguishes between foreign operations whose functional currency is the local currency and foreign operations whose functional currency is the presentation currency. Applies the appropriate translation method to prepare translated financial statements for each type of foreign operation	✓	✓
6.1.7.4 Income taxes		
a) Understands the adjustments made to accounting income to determine taxable income (see also F5.2.5), and differentiates among timing, temporary and permanent differences	✓	
b) Explains and distinguishes between the following concepts: taxable temporary difference, deductible temporary difference, deferred income tax liability, deferred income tax asset, comprehensive allocation method, taxes payable method	✓	

	R/U	A/A
c) Explains the issues and implications, and applies the methods pertaining to measure, recognizing, reporting, disclosing, analyzing, and accounting for income taxes when there are temporary and permanent differences, including the following	✓	✓
• Calculation of income tax expense, deferred income/future income tax assets, and deferred income/future income tax liabilities	✓	✓
• Effects of income tax rates and changes in tax rates on deferred income tax accounts	✓	✓
• Accounting treatment of tax loss carrybacks and carryforwards	✓	✓
• Intraproduct tax allocation versus differential reporting for income taxes	✓	✓
6.1.7.5 Financial instruments		
a) Explains the issues and applies the methods pertaining to issuing, holding, disposing/retiring, classifying, measuring, recognizing, reporting, disclosing, analyzing, and accounting for the following financial instruments:		
• Bonds payable (including related interest expense for bonds issued at par, discount or premium, on an interest date or between interest dates, using effective interest methods of depreciation, accounting for issuing costs, etc.)	✓	✓
• Perpetual, convertible, and other debt (including bonds, mortgages, notes, and loans, the book value methods of accounting for conversions and repayment of debt)	✓	✓
• Common shares (including issuance in combination with other securities, non-monetary exchanges, repurchases/retirements/cancellations of shares previously outstanding and various types of dividends)	✓	✓
• Preferred shares (including retractable, convertible, cumulative and participating)	✓	✓
• Compensatory and non-compensatory stock options, rights, and warrants	✓	✓
b) Explains and accounts for a financial reorganization or restructuring of a business or enterprise	✓	✓
6.1.7.6 Hedges (see also F5.2.1.1 and F5.2.3)		
a) Explains the issues and implications, and applies the methods pertaining to calculating, recognizing, reporting, disclosing, analyzing, and accounting for hedges (including fair value, cash flow, revenue, derivative, foreign currency and monetary item hedges, exchange gains and losses, premiums and discounts, criteria for determining qualifying hedges, and impact on financial statements)	✓	✓
6.1.8 Explains the basic concepts that underlie the following:		
6.1.8.1 Accounting for business combinations		
a) Describes a business combination and explains the methods by which a business combination can be achieved (e.g. purchase of assets, purchase of shares or purchase of an unincorporated entity)	✓	✓

	R/U	A/A
b) Understands and applies the entity method to prepare the balance sheet immediately after a business combination resulting from a purchase of net assets and a purchase of shares	✓	✓
c) Explains push down accounting	✓	
d) Explains and applies the equity or cost method	✓	✓
6.1.8.2 Preparation of consolidated statements		
a) Determines whether a company has control over another company	✓	✓
b) Explains and applies the procedures and methods of preparing consolidated financial statements for wholly owned and non-wholly owned subsidiaries immediately after the business combination and for subsequent years (without consideration of unrealized profits)	✓	✓
c) Explains the concept of non-controlling interests and their impact on financial reporting	✓	
6.1.8.3 Accounting for an investment in a joint venture		
a) Describes a joint venture and differentiates it from other forms of business arrangements between entities	✓	
b) Explains the issues and procedures for accounting for an investment in a joint venture, including consolidation of a venturer and a joint venture, and the treatment of inter-company transactions, purchase discrepancies, and gains on assets contributed as an investment in a joint venture	✓	
6.1.8.4 Preparation of segment disclosures		
a) Describes the reasons for and applicability of financial reporting on a disaggregated basis	✓	
b) Describes and applies the criteria used to identify operating segments of an enterprise	✓	✓
c) Describes and applies the quantitative thresholds used to identify reportable operating segments	✓	✓
d) Describes the disclosure requirements for reportable segments	✓	
e) Describes the purpose, unique problems, general principles of application and reporting requirements pertaining to interim financial reporting, and explains the discrete and integral approaches	✓	
6.1.9 <i>Prepares the financial statements for a given not-for-profit organization and explains the basic concepts involved in doing so</i>		
a) Describes the characteristics of not-for-profit organizations and explains the objectives of financial reporting for such organizations	✓	
b) Explains the primary reporting issues for a not-for-profit organization (e.g. expense versus expenditure reporting, capital assets, segregation of resources, donated goods and services, accounting for pledges, etc.)	✓	
c) Describes fund accounting, and explains and applies the deferral and restricted fund methods of reporting for not-for profit organizations	✓	✓
d) Explains budgetary control accounts and encumbrance accounting	✓	

	R/U	A/A
6.1.10 <i>Describes the differences between financial reporting for governments and financial reporting for business organizations</i>	✓	
a) Describes the unique characteristics of governments that differentiates them from business and not-for-profit organizations	✓	
b) Describes the objectives of government reporting and the unique aspects and issues of financial reporting for governments	✓	
6.1.11 <i>Describes the role and composition of the external auditors' report</i>	✓	
6.1.12 <i>Describes the role and composition of the Report of Management</i>	✓	
6.1.13 <i>Monitors and describes current trends and emerging issues in financial reporting (e.g. move toward international reporting standards, new guidelines for accounting for investments, etc.)</i>	✓	

F6.2 Financial Analysis

Evaluating performance and risk by using benchmarks, ratios, and trend and comparative analysis.

	R/U	A/A
6.2.1 <i>Describes the relevance of financial statement analysis to management decision making in a given organization</i>	✓	
a) Explains the relevance of the various components of a typical annual report, and describes the limitations of conventional financial statements and of their analysis	✓	
b) Describes the objectives, standards, and sources of information for financial statement analysis	✓	
c) Explains the use of benchmarks, and trend and comparative analysis (e.g. vertical, horizontal, and common size analysis, comparisons to competitors, etc.) for evaluating performance and risk	✓	
d) Explains the major types of ratio and financial statement analysis (e.g. activity/turnover/efficiency, liquidity, coverage/solvency/leverage, profitability/market value, etc.)	✓	
6.2.2 <i>Performs financial statement analysis and highlights issues for given organizations using financial ratios, common-size financial statements, trend analysis, etc.</i>		
a) Calculates and interprets various financial ratios for a given organization, and assesses its financial situation		✓
b) Explains and applies the DuPont system of analysis, and interprets the results		✓
c) Applies benchmarks, trend and comparative analysis, and other financial analysis techniques, and interprets the results		✓

ENABLING COMPETENCIES

E1 PROBLEM SOLVING AND DECISION MAKING

This enabling competency pertains to innate analytical and problem-solving skills and the capacity for innovative and integrative thought, as well as the ability to connect “parts” and “wholes,” identify and manage priorities, and adopt a broad view.

Objectives:

The candidate is able to

- *analyze* and *solve* problems systematically;
- *examine* hypothetical business cases; and
- *make* decisions with comparatively narrow scope (i.e. with nominal effect on others).

E1.1 Problem Solving and Decision Making

Using a systematic approach for problem solving and applying integrative thinking, judgement, and stakeholder analysis to decision making.

- 1.1.1 Describes and develops research and problem solving skills within an academic environment.
 - 1.1.1.1 Designs the problem-solving process.
 - 1.1.1.2 Develops problem-solving criteria.
 - 1.1.1.3 Generates and researches alternatives.
 - 1.1.1.4 Evaluates and chooses alternatives.
 - 1.1.1.5 Presents findings in written and oral formats.
- 1.1.2 Systematically collects and analyzes data, generates and evaluates alternatives, and proposes solutions to given problems.
- 1.1.3 Applies critical thinking skills to a given business case.
 - 1.1.3.1 Reviews a case study and breaks it down into component parts.
 - 1.1.3.2 Analyzes elements of the problem from a variety of perspectives.
 - 1.1.3.3 Determines the impacts on other aspects of the business.
 - 1.1.3.4 Considers a variety of solutions and evaluates the impact of each scenario on key stakeholders.
 - 1.1.3.5 Reviews relevant cases and literature.
 - 1.1.3.6 Recommends solutions based on an integrative view of the best outcome.

E2 LEADERSHIP AND GROUP DYNAMICS

This enabling competency pertains to the ability to work in, build, and lead teams. This involves skill in such areas as organization, goal setting, collaboration, process management, coaching, mentoring, influencing, convincing, empathy, flexibility, negotiation, and change management.

Objectives:

The candidate is able to

- *recognize* opportunities consistent with organizational goals;
- *seize* these opportunities both as an individual and as a member of a team; and
- *make* effective personal contributions to the quality of overall team performance.

E2.1 Leadership and Group Dynamics

Achieving organizational goals through individual action and team efforts.

- 2.1.1 Recognizes and personally acts on opportunities that are consistent with organizational goals.
- 2.1.2 Takes the initiative in setting team goals and objectives that are consistent with organizational goals.
 - 2.1.2.1 Establishes well-defined team goals.
 - 2.1.2.2 Establishes timelines for completion of tasks.
 - 2.1.2.3 Breaks down team goals into manageable objectives.
 - 2.1.2.4 Specifies tasks to be completed by each team member.
- 2.1.3 Supports members of the team.
 - 2.1.3.1 Assists team members with tasks when needed.
 - 2.1.3.2 Develops team members' skills.
 - 2.1.3.3 Encourages participation by all team members.
 - 2.1.3.4 Identifies strengths of team members.
- 2.1.4 Makes constructive personal contributions to team performance.
 - 2.1.4.1 Listens well to other team members' input.
 - 2.1.4.2 Participates actively in team discussions.
 - 2.1.4.3 Communicates ideas effectively at team meetings.
 - 2.1.4.4 Prepares for team meetings.
 - 2.1.4.5 Takes direction from the team leader.
 - 2.1.4.6 Recognizes team norms and operates within them when appropriate.

E3 PROFESSIONALISM AND ETHICAL BEHAVIOUR

This enabling competency pertains to the ability to operate with honesty, integrity, credibility, self-confidence, self-control, organization, attention to detail, and independence as well as the ability to cope with ambiguity, identify conflicts of interest, exercise due diligence, protect the public interest, adhere to the rules of professional conduct, and enhance the reputation of the profession.

Objectives:

The candidate is able to

- *develop* the inherent qualities and *acquire* the demonstrable behaviours that are critical to professionalism and ethical conduct;
- *identify* potential professional and ethical conflicts in a given situation; and
- *commit* to the CMA Code of Conduct.

E3.1 Professionalism and Ethical Behaviour

Developing the inherent qualities and acquiring the necessary skills that result in professional and ethical conduct.

- 3.1.1 Describes and develops the personal attributes required of a professional accountant.
- 3.1.2 Completes coursework independently and prepares for exams.
 - 3.1.2.1 Pays attention to detail.
 - 3.1.2.2 Works autonomously.
 - 3.1.2.3 Demonstrates a commitment to excellence.
 - 3.1.2.4 Establishes and maintains an organized approach.
 - 3.1.2.5 Maintains academic integrity and honesty.
 - 3.1.2.6 Fulfils commitments to faculty and peers.
- 3.1.3 Completes coursework in groups.
 - 3.1.3.1 Meets commitments and deadlines.
 - 3.1.3.2 Maintains trust and honesty.
 - 3.1.3.3 Exhibits self-confidence.
- 3.1.4 Treats others in a professional manner.
 - 3.1.4.1 Maintains appropriate conduct and demeanour.
 - 3.1.4.2 Maintains trust and honesty.
 - 3.1.4.3 Respects the opinions of others.

- 3.1.5 Maintains legal and ethical standards in both public and private life.
 - 3.1.5.1 Exhibits personal integrity and honesty.
 - 3.1.5.2 Exhibits self-control.
 - 3.1.5.3 Maintains confidentiality of business information.
 - 3.1.5.4 Demonstrates ethical business practices.

E4 COMMUNICATION (BOTH WRITTEN AND ORAL)

This enabling competency pertains to the ability to communicate effectively. This involves listening, understanding, speaking, and writing with clarity; the art of persuasion; and skill in communicating complex matters to all levels of the organization.

Objectives:

The candidate is able to

- *listen* effectively;
- *write* effectively;
- *use* appropriate communication structures, technologies, and presentation techniques with confidence; and
- *document* and *report* on quantitative and qualitative issues clearly and concisely in a manner appropriate to the audience in a given situation.

E4.1 Communication (both written and oral)

Understanding and communicating effectively in a variety of settings.

- 4.1.1 Communicates effectively and confidently before an audience using techniques appropriate to:
 - 4.1.1.1 Case reports and presentations; and
 - 4.1.1.2 Examinations.
- 4.1.2 Listens effectively in a given situation.
 - 4.1.2.1 Takes notes effectively during classes.
 - 4.1.2.2 Listens effectively during employment interviews.
- 4.1.3 Gives and receives feedback/criticism appropriately when interacting with:
 - 4.1.3.1 Faculty; and
 - 4.1.3.2 Fellow students.
- 4.1.4 Asks insightful questions of:
 - 4.1.4.1 Faculty and classmates;
 - 4.1.4.2 Team members; and
 - 4.1.4.3 Potential employers.