PRINCIPLES OF ACCOUNTING TEACHING AND LEARNING SYLLABUS Pre-University H2

Implementation starting with 2018 Pre-University One Cohort



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SECTION 1: INTRODUCTION

- 1.1 What Accounting Is
- 1.2 Design Considerations of A-Level H2 Principles of Accounting
 - 1.3 Syllabus Aims of A-Level H2 Principles of Accounting
- 1.4 A-Level H2 Principles of Accounting and 21st Century Competencies

1. INTRODUCTION

1.1 WHAT ACCOUNTING IS

Businesses engage in economic activities¹ using resources sourced from stakeholders and, because of this, business economic activities have implications for these stakeholders². As a result, all stakeholders require financial information related to the economic activities of the business, so that decision-making concerning the business³ is facilitated. These decisions, in turn, have consequences on the business and its economic activities.

It is the primary role of accounting to provide useful financial information that supports and facilitates stakeholders' decision-making. From a macro perspective, accounting plays an important role in the economy by representing and measuring heterogeneous economic activities with a common unit of measurement, that is, in monetary terms. The constructs used to represent and measure business economic activities allow one to think meaningfully about a business and the economic activities it engages in, thereby enabling discussions about the business to be carried out and perceptions to be formed. This then allows comparisons with other economic activities or business entities. The results are evaluated and used to assist economic decision-making concerning the business entity that is being measured.

The uniqueness of accounting lies in how business economic activities are represented and measured quantitatively. Through accounting, one will understand the constructs used to represent and measure flows of physical goods, materials, labour and other resources in and out of a business entity. Because of how accounting imposes a quantitative way of conceiving economic activities of the business, numbers in accounting have unique meanings and relationships with the underlying economic activities of the business and with each other.

As economic activities are complex in reality, accounting theorists and professionals recognise that a numerical mode of representation is limited⁴. Hence, accounting theory and practice have been influenced by different perspectives on how financial numbers should represent economic realities and how the numbers are to be understood. This discourse continues to generate interest, as economic activities become more and more complex in the 21st century. The following are some perspectives of what accounting should be (Morgan, 1988):

- Accounting is a historical recording of economic activities of the business.
- Accounting is to reflect current economic realities and basic economic principles.
- Accounting is part and parcel of a management information system.
- Accounting is a language used to describe and think about economic activities of businesses.
- Accounting is to reflect the values and needs of interest groups who seek to influence business decisions.
- Accounting is a means to heighten accountability and influence employees' behaviour.

Because financial information has the potential to influence business decisions, which may have far reaching consequences, the accounting profession is cognisant of the social responsibility it owes to the public to act in their interests. Towards this end, the profession upholds a set of professional values and conduct. Any new member to the accounting fraternity is inducted into the norms and mores of the profession.

1.2 DESIGN CONSIDERATIONS OF A-LEVEL H2 PRINCIPLES OF ACCOUNTING

There are two broad approaches to accounting education: the user and preparer perspectives. The user perspective focuses on learning how to use accounting information for decision-making, which is what non-accountants are interested in (and what accountants are increasingly required to do). The preparer perspective focuses on learning how to prepare and communicate accounting information, which is the realm of what accountants do.

The intent of an A-level education is to provide students with the foundational knowledge and skills that will enable them to pursue any field of study or work thereafter, not to nurture work-ready students for the accounting profession or its related fields. Thus, it would not benefit students if the syllabus were to adopt either a wholly user or preparer perspective.

Instead, the syllabus places emphasis on both the user and preparer perspectives. Students are taught to become users of accounting information, knowledge and skills that will be valuable in any field of work or life in general. The syllabus also develops in students the knowledge and skills required for preparing and presenting accounting information, as these will help students better appreciate how the information should be used.

Thus, the H2 Principles of Accounting syllabus is designed as an introductory accounting subject offered as a three-year A-level programme, and no prior knowledge in accounting is required. It is not the subject's intent to induct students into the accounting profession, but instead seeks to help students understand the principles of how financial numbers are used to represent and measure business economic activities. Through this study of accounting principles, students will be nurtured in the approaches to and qualities of thinking, as well as the values that an accounting professional would adopt. The H2 Principles of Accounting subject is not a pre-requisite for any business-related courses, but it will provide students who aspire to specialise in accounting after the A-levels with the necessary foundational knowledge and skills.

1.3 Syllabus Aims of A-Level H2 Principles of Accounting

The H2 Principles of Accounting syllabus seeks to develop in students the knowledge and skills to use, prepare and communicate accounting information.

To use accounting information is to understand what business decisions are, how decisions are made using accounting information and the limitations of relying on such information. Preparing accounting information entails understanding the purpose of the information, how economic activities are represented and measured, and the limits of what can be measured; through this process of preparation, students learn how to critically evaluate the accounting information that they use. Communicating accounting information entails presenting and describing business economic activities in a useful manner that can be understood by others.

Knowledge and Understanding

The syllabus intends for students to develop the following knowledge and understanding:

- the purpose of accounting as providing financial information to support and facilitate decision-making, and thus the importance of the qualitative characteristics of useful financial information, as well as the ethical values of the people who prepare the information;
- the financial effects of economic activities according to their economic characteristics, and the manner of representation of economic activities of a business;
- the principles underlying accounting as a measurement system;
- the aspects of the economic activities being measured so as to support decision-making, and the measurement methods and techniques;
- the accounting information system and accounting cycle, and the double-entry recording method in maintaining records of economic activities;
- the significance of the measurement results in relation to the economic performance and position of a business; and
- the tools and techniques used to analyse financial information in order to support and facilitate decision-making by external and internal stakeholders.

Skills

The syllabus intends for students to develop the following skills:

- numeracy skill in detecting underlying patterns and relationships between financial numbers, and interpreting the patterns and relationships in relation to business economic activities;
- synthesis and presentation skills in the preparation of accounting information in a suitable form:
- analytical skill in breaking down business economic activities for their financial effects, in assessing financial impact for implications on the business, and in using financial information for decision-making; and
- evaluative skill in using financial information for decision-making.

Values and Attitudes

The syllabus intends for students to develop the following values and attitudes:

- having integrity and being objective;
- being accountable and responsible for one's actions;
- having a sense of social responsibility to act with due care; and
- being logical, methodical, consistent and accurate.

1.4 A-LEVEL H2 PRINCIPLES OF ACCOUNTING AND 21ST CENTURY COMPETENCIES

The 21st Century Competencies Framework

Knowledge and skills must be underpinned by values, as these define a person's character, often shaping the beliefs, attitudes and actions of a person. Values, therefore, form the core of the 21st Century Competencies framework, specifically *Respect*, *Responsibility*, *Integrity*, *Care*, *Resilience* and *Harmony*.

The middle ring in Figure 1, on the following page, signifies the Social and Emotional Competencies – skills necessary for children to recognise and manage their emotions, develop care and concern for others, make responsible decisions, establish positive relationships, as

well as handle challenging situations effectively. These competencies are Self-Management, Social Awareness, Responsible Decision-Making, Relationship Management, and Self-Awareness.

The outer ring of the framework represents the emerging 21st Century Competencies necessary for the globalised world we live in. These are: Civic Literacy, Global Awareness and Cross-Cultural Skills; Critical and Inventive Thinking; and Communication, Collaboration and Information Skills.

The four qualities listed outside of the rings in Figure 1 are the Desired Outcomes of Education (DOE) – attributes that educators aspire to instil in every Singaporean by the completion of his/her formal education. The DOE establish a common purpose for educators, drive our policies and programmes, and allow us to determine how well our education system is doing.

Together, these competencies enable our students to tap into the global opportunities in the new digital age, while maintaining a strong Singapore heartbeat.

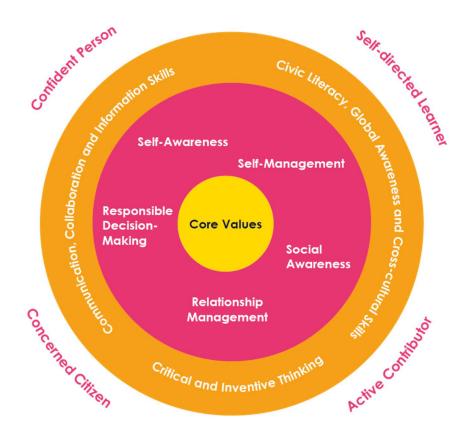


Figure 1: 21st Century Competencies Framework

The Desired Outcomes of Education

The person who is schooled in the Singapore education system embodies the Desired Outcomes of Education. He has a good sense of self-awareness, a sound moral compass, and the necessary skills and knowledge to take on challenges in the future. He is responsible to his family, community and nation. He appreciates the beauty of the world around him, possesses a healthy mind and body, and has a zest for life. In sum, he is:

- a confident person who has a strong sense of right and wrong, is adaptable and resilient, knows himself, is discerning in judgment, thinks independently and critically, and communicates effectively;
- a self-directed learner who questions, reflects, perseveres and takes responsibility for his own learning;
- an *active contributor* who is able to work effectively in teams, is innovative, exercises initiative, takes calculated risks and strives for excellence; and
- a concerned citizen who is rooted to Singapore, has a strong sense of civic responsibility, is informed about Singapore and the world, and takes an active part in bettering the lives of others around him.

Principles of Accounting and Core Values

The H2 Principles of Accounting syllabus will cultivate in students the value of integrity and the ethos to act responsibly. The syllabus defines integrity as being straightforward and honest in all professional and business relationships. By understanding that external and internal stakeholders rely on financial statements for decision-making, students will develop an acute awareness of how important it is for the person who prepares, communicates or uses accounting information to have integrity and a strong sense of responsibility to act in the public's interest. Furthermore, students are required to assess business situations involving ethical conflicts and the financial impact of unethical accounting practices. Thus, students not only become aware of ethical values, but also understand the consequences of unethical behaviour in the context of accounting and business.

Emerging 21st Century Competencies

Critical and Inventive Thinking

Curiosity and Creativity refers to the desire to seek and learn new knowledge and generate relatively novel and appropriate ideas or new products. Curiosity and Creativity includes: wondering and asking questions; being resourceful, flexible and adaptable, and having an open mind; being willing to take risks and accept mistakes; and being imaginative and having the ability to envisage possible futures.

Sound Reasoning and Decision-Making refers to the development of well-constructed explanations and well-substantiated conclusions by seeking understanding through questioning, analysis, comparison, inference/interpretation, evaluation, and synthesis of evidence and arguments. Sound Reasoning and Decision-Making includes: extracting implications and conclusions from facts, premises, ethical issues, or data; constructing relationships between the essential elements of a problem; and challenging social norms to provide alternative theories and explanations.

Metacognition refers to thinking about one's own thinking – that is, gaining an awareness of and control over one's own thinking through reflection to become a more effective thinker and learner. Metacognition includes: questioning and refining thoughts, attitudes, behaviour and actions; suspending judgement; reassessing conclusions and considering alternatives; and stepping back to take the larger picture into account, to verify one's own pattern of thinking.

Managing Complexities and Ambiguities refers to the modification of thinking, attitudes, behaviour and/or skills to adapt to diverse demands and challenges in new, unfamiliar contexts. Managing Complexities and Ambiguities includes: tolerating ambiguity; keeping

an open mind in order to consider, respect and accept alternative perspectives, solutions or methods; taking on diverse roles; multi-tasking; and being resilient and focused on pursuing goals despite difficulties and unexpected complications.

Communication, Collaboration and Information Skills

Effective Communication refers to the clear and coherent exchange of information and ideas in multimodal ways for specific purposes, audiences, and contexts. Effective communication includes: interacting with others from diverse backgrounds through a variety of means and being open to and respecting ideas from others when co-constructing meanings.

Effective Collaboration refers to individuals working together in a respectful manner to share responsibilities and make decisions with one another to meet group goals. Effective collaboration includes: exercising individual and group accountability by communicating effectively with one another and discharging the roles assumed by each individual in a pair/group; working together in pairs/groups with shared responsibilities to contribute to the completion of a task or the achievement of shared goals; and being actively reflective about how to improve one's working relationship with others, in order to achieve group goals.

Management of Information refers to the act of taking charge of information through the thoughtful identification, sourcing, evaluation, and synthesis of information, facilitated by the appropriate use of technology. Management of Information includes: defining the problem and identifying the information needed; locating and connecting information across different sources; assessing the information systematically for accuracy, credibility and currency; developing strategies to source and organise information; and integrating the information to draw conclusions and develop new understanding.

Responsible Participation in the Information Landscape refers to one's engagement in ethical and respectful practices when using and creating information. Responsible participation includes: respecting intellectual property rights; adhering to civic and lawful behaviour on the Internet; and maintaining a positive presence on the Internet.

Civic Literacy, Global Awareness and Cross-cultural Skills

Active Community Life refers to playing one's part in ensuring the well-being of the community and nation. Active Community Life includes: demonstrating a sense of responsibility towards the community; being civic-minded; and supporting and contributing through community and nation-building activities. The focus is on solidarity, involvement and engagement within the community.

National and Cultural Identity refers to a sense of self derived from the distinct characteristics of a nation and its culture as a whole. National and Cultural Identity includes: possessing a sense of responsibility to the nation; and having a shared commitment to the ideals of the nation and its culture.

Global Awareness refers to being aware about world issues and possessing a desire to contribute to the well-being of the international community while maintaining a sense of rootedness. Global Awareness includes the ability to: cope with change due to cultural

interactions abroad; and recognise, analyse and evaluate global trends and their interconnections with local communities.

Socio-cultural and Religious Sensitivity and Awareness refers to the perception and articulation of the thoughts, feelings and behaviour of people from different socio-cultural and religious backgrounds. Socio-cultural and Religious Sensitivity and Awareness includes the ability to: empathise with others through understanding, acceptance and respect; and engage in appropriate behaviour with people from different socio-cultural and religious backgrounds in both local and international contexts, in ways which would enhance social cohesion.

Principles of Accounting and the Standards and Benchmarks for Emerging 21st Century Competencies

The standards and benchmarks for the emerging 21st Century Competencies at the preuniversity level, including references to the prescribed content in this syllabus, are presented in Tables 1, 2 and 3.

The standards are aspirational statements that define what the students should know and be able to do. The benchmarks clarify and specify the standards, describing behaviours that are developmentally appropriate and achievable by the majority of PU3 students.

Table 1: Standards and Benchmarks for Critical and Inventive Thinking

Standards	Benchmark	Learning Opportunities in Principles of Accounting
Explores possibilities and generates ideas	The student is able to generate ideas and explore different pathways that lead to solutions.	Students use accounting tools and techniques to consider alternative proposals before recommending a solution to a business decision.
Exercises sound reasoning, decision-making and metacognition	The student is able to use evidence and adopt different viewpoints to explain his/her reasoning and decisions, having considered the implications of the relationship among different viewpoints.	Students consider the interests and decisions of stakeholders, and draw implications from trends of financial figures in evaluating the financial performance and position of the business. They analyse economic activities from the position of the business.
	The student is able to suspend judgement, reassess conclusions and consider alternatives to refine his/her thoughts, attitudes, behaviour and actions.	In addition to quantified financial values, students consider qualitative information in proposing a solution to a business decision. Working in pairs or groups, students negotiate understanding and propose solutions.
Manages complexities and ambiguities	The student is able to identify essential elements of complex tasks, stay focused on them, take on diverse roles and	Students select and analyse relevant information to synthesise into useful financial information. They select and analyse relevant revenue and costs to

Standards	Benchmark	Learning Opportunities in Principles of Accounting
	persevere when he/she encounters difficulties and unexpected challenges.	propose a solution to a business decision. In considering the limitations of accounting measurements, students learn of the complexities of different valuation methods.
		The relevant information in extended problem questions and case studies is often not arranged in a clear logical order. By working on such materials, students learn to identify, select and organise relevant information.
	The student is able to manage uncertainty and adapt to diverse demands and challenges in new and unfamiliar contexts.	Through case studies and problem questions, students will analyse and reconstruct financial figures and financial statements from incomplete accounting records. When additional information is provided to students, they will have to review and re-work their previous conclusions.

<u>Table 2</u>: Standards and Benchmarks for Communication, Collaboration and Information Skills

Standards	Benchmark	Learning Opportunities in Principles of Accounting
Communicates and collaborates effectively	The student is able to convey complex information and ideas coherently and clearly to influence and create impact for specific purposes and contexts.	Students present their recommendations and assessment of the financial performance and position of a few businesses.
		Students learn to convey ideas coherently and clearly by working on reports and presentations.
	The student is able to interact with others to construct and critically evaluate knowledge, new understandings and ideas.	Students learn to consider and reconcile team members' views while working in pairs or groups.
	The student is able to reflect on and modify his/her working relationships and role in contributing to the group's goals, as determined collectively by its members.	Students learn to build on each other's work while working in pairs or groups on a case study.

Standards	Benchmark	Learning Opportunities in Principles of Accounting
Manages, creates and shares digital information thoughtfully, ethically and responsibly	The student is able to refine search results, organise information systematically and manage information sensitively, while abiding by copyright regulations and minimising security risks in the handling of information.	Students learn to search for, organise and manage information while working on projects.
	The student is able to verify the accuracy, credibility and currency of information across multiple sources.	Students learn to verify information across different sources while working on projects.
	The student is able to modify and integrate varied media elements to construct a digital artefact, while making informed choices with regard to how to use information ethically.	Students develop digital artefacts while working on a report or presentation.
	The student is able to contribute actively and value-add to the information pool in an online community, while observing proper etiquette.	Students contribute to and build on each other's curated information and views while working on online platforms.
	The student is able to project a positive online presence and manage his/her online reputation.	Students learn to conduct themselves responsibly while working on online platforms.

Table 3: Standards and Benchmarks for Civic Literacy, Global Awareness and Cross-cultural Skills

Standards	Benchmark	Learning Opportunities in Principles of Accounting
Aware of community and national issues and plays a part to improve the community and nation	The student is able to discuss issues that affect the culture, socio-economic development, governance, future and identity of Singapore and consider their implications.	Students understand that accounting information is used to support and facilitate stakeholders' decision-making. They consider who the stakeholders are, their interests in the business and the decisions they make. They also understand the financial effects of unethical accounting practices on stakeholders' decisions.
	The student is able to independently initiate, plan and organise school and community activities/programmes to address social issues.	Students participate in school and community activities to address social issues by volunteering their services to prepare or examine the accounts of non-profit organisations.
Aware of global issues and trends	The student is able to analyse global trends and their implications for Singapore and other countries.	Students become aware of global issues and trends by analysing the impact, on Singapore and the world, of accounting frauds which originated overseas.
Displays socio-cultural and religious sensitivity and awareness	The student is able to demonstrate appropriate skills and behaviour to work together with people from a diverse range of socio-cultural and religious backgrounds within and beyond Singapore.	Students work with peers from different backgrounds when working in pairs or groups.
	The student is able to contribute to promoting Singapore's social cohesion.	Students learn of the diversity in a society when they understand that stakeholders interested in the financial information of the business are individuals and entities, and either have direct or indirect relationships with the business.

ENDNOTES:

- ¹ Economic activities are activities of producing, buying and selling products or services (as defined by the Cambridge Dictionary, http://dictionary.cambridge.org/dictionary/business-english/economic-activity). Accounting is primarily concerned with the economic activities of a specific business (termed the "accounting entity"), not at the aggregate level (though the aggregated information may be useful to economists, government, etc.). The term "business economic activities" is adopted to denote economic activities undertaken by the specific business.
- ² Examples of stakeholders who provide resources to the business are: investors and lenders. Examples of stakeholders who are affected by the economic activities of the business are: employees, suppliers, customers, the government, and the general public. Stakeholders are broadly grouped as internal and external.
- ³ For instance, investors use the financial information showing the economic activities of the business to decide whether to maintain, increase or decrease their investment in the business. Although the investors do not directly make decisions concerning the economic activities of the business, their decisions will affect the business, such as in limiting the ability of the business to raise funds. Only one group of stakeholders the managers will make decisions that directly affect the economic activities of the business. Although it is debatable whether managers are considered stakeholders or not, generally, most business management and accounting books consider them to be so.
- ⁴ Accounting is said to represent and measure the economic activities of a business. Although this seems an objective endeavour, assumptions and judgements underline how economic activities are represented and measured. Hence, accountants never profess that the financial numbers are the "true value". That is, one cannot claim that the accounting profit is the "true" or "actual" profit of the business. However, if the same assumptions and manner of making the judgements are consistent between periods of time and between entities, then the financial numbers become useful.

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SECTION 2: CONTENT

- 2.1 CONTENT FRAME
- 2.2 Key Understandings
 - 2.3 CONTENT OUTLINE
- 2.4 CONTENT AMPLIFICATION AND LEARNING OUTCOMES
 - **KEY UNDERSTANDING 1:**
- ACCOUNTING INFORMATION IS USED TO SUPPORT AND FACILITATE DECISION-MAKING
 - KEY UNDERSTANDING 2:
 - ACCOUNTING IS A LANGUAGE USED TO REPRESENT BUSINESS ECONOMIC ACTIVITIES
 - KEY UNDERSTANDING 3:
 - ACCOUNTING IS A MEASUREMENT SYSTEM OF BUSINESS ECONOMIC ACTIVITIES

2. CONTENT

2.1 CONTENT FRAME

The content will be framed by three Key Understandings (see Figure 2 below).

Key Understanding 1 aligns with the primary purpose of accounting: the rationale for the subject-matter and its place in human society. Key Understandings 2 and 3 outline the accounting constructs and the "modes of thinking and doing" of the accounting professional in relation to business economic activities. A core idea — that financial numbers convey information about the economic activities of the business — connects the three Key Understandings. The value of learning Principles of Accounting is to understand how financial information about the economic activities of the business is derived and how it is used.

The three Key Understandings are inter-related. Even as business economic activities are represented and measured based on immutable accounting constructs (Key Understandings 2 and 3), the application of the constructs must respond to the changing information needs of stakeholders. In turn, the accounting function derives meaning when it fulfils stakeholders' specific information needs (Key Understanding 1). The relationship between the three Key Understandings is illustrated in Figure 2.

Key Understanding 1: Accounting information is used to support and facilitate decision-making.

Stakeholders require financial information on business economic activities for decision-making, which in turn has consequences on the business and its economic activities.

Accounting information serves specific needs.



Accounting practice changes as information needs change.

Key Understandings 2 and 3 define the accounting constructs.

Key Understanding 2: Accounting is a language used to represent business economic activities.

Accounting is the language of business as it provides the vocabulary, concepts and framework to think about, discuss and perceive business economic activities.

Key Understanding 3: Accounting is a measurement system of business economic activities.

Accounting quantifies and measures business economic activities. A measurement system is supported by a reliable information system.

Core Idea:

Financial numbers are meaningfully related to underlying business economic activities and to each other.

Figure 2: Principles of Accounting Content Conceptual Frame

2.2 Key Understandings

Key Understanding 1:

Accounting information is used to support and facilitate decision-making.

Businesses engage in economic activities using resources sourced from stakeholders. In turn, business economic activities affect stakeholders. Both external and internal stakeholders make decisions concerning the business, and they rely on financial information about the economic activities of the business generated by the accounting function to do so.

This Key Understanding will cover the following:

- 1 How stakeholders use the financial information of the business for decision-making and why they need this information. The kind of information that supports effective decision-making will be considered: Is financial information alone sufficient? If not, what non-financial information of the business would stakeholders be interested in?
- The decisions that stakeholders make based on financial information have far-reaching consequences. What are the qualities of useful financial information? What are the qualities that the people who prepare accounting information should possess and adhere to?
- 3 The difference between external and internal stakeholders and their use of financial information for decision-making. Which aspects of the business are external stakeholders interested in and how are these aspects related to the decisions they make? How do internal stakeholders of the business use financial information to support managerial decision-making?

Key Understanding 2:

Accounting is a language used to represent business economic activities.

Accounting provides the vocabulary, concepts and framework to represent the physical flows of economic resources, and the economic performance and position of the business, by grouping the effects of economic activities according to their economic characteristics. Accounting is considered the language of business as it allows one to think about, discuss and perceive business economic activities.

This Key Understanding will cover the following:

- The types of economic activities and how they are related to the operations of the business. What are the economic characteristics of each element of the financial statements? How are they used to represent the financial effects of economic activities and the relationship connecting the elements?
- 2 Financial statements that represent economic activities. What are the different types of financial statements and the specific financial information of a business that each conveys? What is the relationship connecting the financial statements?
- How financing, investing and operating economic activities are presented on financial statements. The financing, investing and operating economic activities included in the syllabus are those relating to shareholders' equity, long-term and short-term borrowing, property, plant and equipment, income and expenses, inventories, trade receivables and other receivables, trade payables and other payables, and cash.

Key Understanding 3:

Accounting is a measurement system of business economic activities.

Diverse economic activities are quantified and measured in monetary value: physical flows of economic resources are expressed quantifiably in monetary terms. Expressed in a numerical form, it facilitates comparisons to be done, performance to be tracked and evaluations to be made. A reliable measurement system must be supported by an information system, which systematically collects, organises and records business economic activities into information.

This Key Understanding will cover the following:

- An accounting measurement system is undergirded by principles, and these principles in turn limit what can be measured. How are these principles used to represent and present economic activities of businesses, and what are the limitations?
- 2 A reliable measurement system must be supported by an information system that systematically collects, organises and records economic activities. Hence, how are economic activities processed, and how are economic activities at the transactional level maintained in an accounting information system?
- As the decisions facing external and internal stakeholders differ, the two groups require different aspects of the business to be measured. What are the aspects of the economic activities being measured so as to support external and internal stakeholders' decision-making? How are the aspects being measured related to each other?

2.3 CONTENT OUTLINE

Key Understanding 1:

Accounting information is used to support and facilitate decision-making.

- 1.1 Stakeholders and Decision-making
- 1.2 Business Ethics

Financial Accounting

- 1.3 Qualitative Characteristics of Useful Financial Information
- 1.4 Financial Statements Analysis

Managerial Accounting

- 1.5 Cost-volume-profit Analysis
- 1.6 Variance Analysis
- 1.7 Capital Investment Analysis
- 1.8 Relevant Information for Decision-making

Key Understanding 2:

Accounting is a language used to represent business economic activities.

Financial Accounting

Businesses and Economic Activities

- 2.1 Types of Businesses
- 2.2 Forms of Business Ownerships
- 2.3 Business Economic Activities

Representation and Presentation of Economic Activities

- 2.4 Elements of Financial Statements
- 2.5 Accounting Equation
- 2.6 Financial Statements

Representation and Presentation of Financing Activities

- 2.7 Shareholders' Equity
- 2.8 Long-term and Short-term Borrowing

Representation and Presentation of Investing Activities

2.9 Property, Plant and Equipment

Representation and Presentation of Operating Activities

- 2.10 Income and Expenses
- 2.11 Inventories
- 2.12 Trade Receivables and Other Receivables
- 2.13 Trade Payables and Other Payables
- 2.14 Cash in Hand and Cash at Bank

Correcting Accounting Errors and Re-construction of Accounts

- 2.15 Correcting Accounting Errors
- 2.16 Incomplete Records

Key Understanding 3:

Accounting is a measurement system of business economic activities.

Financial Accounting

Accounting Assumptions and Principles

3.1 Accounting Principles

Accounting Information System and Accounting Cycle

- 3.2 Accounting Information System and Accounting Cycle
- 3.3 Double-entry Recording

Accounting Measurements

3.4 Measuring Economic Activities

Managerial Accounting

Accounting Measurements

- 3.5 Measuring Costs of Products, Services and Other Cost Objects
- 3.6 Cost Flow in a Manufacturing Business
- 3.7 Normal Job-costing System
- 3.8 Budgeting

2.4 CONTENT AMPLIFICATION AND LEARNING OUTCOMES

Key Understanding 1: Accounting information is used to support and facilitate decision-making.

Students will be able to: Content Stakeholders and Decision-making Stakeholders of the business: shareholders: differentiate between the stakeholders and the financial managers; suppliers; lenders; customers; employees; government; potential investors; information they need; general public. Classification by internal and explain the limitations of financial external stakeholders, and the differences information; and between the two groups and between explain how stakeholders stakeholders. financial and non-financial Business economic decisions stakeholders information. make with respect to the business, and the consequences of stakeholders' decisions on the activities of the business. Stakeholders as users of financial information. The types of financial information stakeholders use to support and facilitate their decisions, and how the financial information is used. Role of the accounting function in providing financial information to support and facilitate users' decision-making. This syllabus requires only the preparation of these financial statements: balance sheet, income statement, statement of changes in equity and statement of cash flows. Limitations of financial and quantitative information for decision-making. Types of nonfinancial and non-quantitative information stakeholders are interested in, and how this information is used.

Content	Students will be able to:
 Business Ethics Ethical values of integrity and objectivity. Examples and non-examples of ethical and non-ethical behaviours, and implications on users' decision-making. Common ethical issues in business: Honesty and fairness. Conflict of interest involving business and personal interests. Frauds of financial statements and misappropriation of the assets of the business. Financial effects of unethical accounting practices, and implications on users' decisionsmaking. 	 evaluate situations involving conflicts with ethics; and analyse the financial effects and the impact on stakeholders' decisions of unethical accounting.
 1.3 Qualitative Characteristics of Useful Financial Information Fundamental qualitative characteristics of relevance and faithful representation. Materiality is a quality of relevance. Examples and non-examples of relevant information, faithful representation and materiality, and implications on users' decision-making. These are not required: The enhancing qualitative characteristics of useful financial information. 	 evaluate how the fundamental qualitative characteristics affect decision-making.
 1.4 Financial Statements Analysis Understanding the income statement, balance sheet and statement of cash flows, as well as the financial information contained within these statements and the manner of presentation of this information. Techniques of financial statements analysis: Analysis methods: horizontal analysis, vertical analysis, ratio analysis. 	 select appropriate areas of analysis to support decision to be made; analyse using horizontal analysis, vertical analysis and ratio analysis; explain the limitations of using financial ratios; and construct financial figures using financial ratios.

- vertical analysis, ratio analysis. o Understanding that financial statement
- analysis is meaningful when financial performance and financial position of the business are compared over time, or other comparable compared with businesses or compared with industry benchmark.
- financial ratios.

Students will be able to:

- Presenting financial trends in a readable format.
- Limitations of using financial ratios and quantitative information for decisionmaking.
- Analysing for areas specified in points a. to e., including:
 - implications of financial trend on the business;
 - improving financial performance, financial position and cash flows; and
 - implications of recommendations on the business and decision-making.
 - **a.** Analysing for profitability and continual operations:
 - Importance of profitability.
 - Understanding profitability trend.
 - Computing profitability financial ratios of:
 - Gross profit margin (%)
 - Mark-up on cost (%)
 - Percentage of operating expense to net sales revenue (%)
 - Net profit margin (%)
 - Return on equity (%)
 - Purpose of each ratio (when it is applicable) and the relationship with other financial ratios.
 - **b.** Analysing for liquidity and going concern:
 - Importance of being liquid, and understanding inventory and cash management. Differences between liquidity and profitability.
 - Understanding liquidity trend.
 - Computing working capital, quick assets and liquidity financial ratios of:
 - Working capital ratio (current ratio)
 - Quick ratio (acid test ratio)
 - Purpose of each ratio (when it is applicable) and the relationship with other financial ratios.

- explain the importance of being profitable;
- select and compute profitability ratios for analysis;
- analyse and interpret financial figures and financial ratios on profitability; and
- evaluate profitability of business and suggest recommendations.

- explain the importance of being liquid;
- select and compute liquidity ratios for analysis;
- analyse and interpret financial figures and financial ratios on liquidity; and
- evaluate liquidity of business and suggest recommendations.

- c. Analysing for efficient use of assets:
 - Importance of investing in assets.
 - Understanding efficiency trend.
 - Computing efficiency financial ratios of:
 - Cash conversion cycle (working capital cycle) (days)
 - Days-sales-in-inventory (days) and rate of inventory turnover (times)
 - Accounts receivable collection period (days) and rate of accounts receivable turnover (times)
 - Accounts payable payment period (days) and accounts payable (times)
 - Purpose of each ratio, when it is applicable and the relationship with other financial ratios.
- **d.** Analysing for solvency and financing decisions:
 - Importance of being solvent, and understanding long-term vs. short-term financing, internal vs. external financing, and financing by debt vs. financing by equity.
 - Understanding solvency trend.
 - Computing solvency financial ratios of:
 - Debt-equity ratio
 - Interest coverage ratio
 - Purpose of each ratio and when it is applicable.
- **e.** Analysing for shareholders rewards or shareholders' investment:
 - Importance of rewarding shareholders, and understanding the implications of share issue and declaring dividends.
 - Understanding shareholders' investment trend.
 - Computing shareholders' investment ratios of:
 - Earnings per ordinary share
 - Price earnings ratio of ordinary shares
 - Dividend yield

Students will be able to:

- explain the importance of being efficient;
- select and compute efficiency ratios for analysis;
- analyse and interpret financial figures and financial ratios on efficient use of assets; and
- evaluate efficient use of assets of business and suggest recommendations.

- explain the importance of being solvent;
- select and compute solvency ratios for analysis;
- analyse and interpret financial figures and financial ratios on solvency; and
- evaluate solvency of business and suggest recommendations.
- explain the importance of rewarding shareholders;
- select and compute shareholders' investment ratios for analysis;
- analyse and interpret financial figures and financial ratios on shareholders' investment; and
- evaluate shareholders' investment of business and suggest recommendations.

Content	Students will be able to:
 Purpose of each ratio, when it is applicable and the relationship with other 	
financial ratios.	

Managerial Accounting

1.5 Cost-volume-profit Analysis

- Cost-behaviour patterns: Variable and fixed costs.
- Relationship between total revenue, total costs and units sold or level of activity:
 - Contribution margin = revenue variable costs, including alternative expression in terms of per unit.
 - Net profit = contribution margin fixed costs.
 - Using the equation method. Reading, but not plotting, a cost-volume-profit graph.
- Analysing the following to support and facilitate decision-making for a single product only:
 - Breakeven quantity and sales revenue.
 - Margin of safety, and target quantity and sales revenue.
- Limitations of the cost-volume-profit analysis in decision-making.
- Presenting contribution margin, fixed costs and profit/loss in an appropriate statement.
- Applying to both manufacturing and service businesses.
- These are not required: Preparation of marginal costing statement, and reconciling margin costing and absorption costing statements.

- explain the limitations of costvolume-profit analysis;
- select and compute contribution margin for analysis;
- analyse for breakeven quantity and sales revenue, and target quantity and sales revenue; and
- evaluate proposals based on costvolume-profit analysis and suggest recommendations.

1.6 Variance Analysis

- Using budget in the decision-making process.
- Human aspects of using budgeting as a management tool.
- Purpose of variance analysis.

- explain the use of budgets as an effective management tool;
- analyse for variances; and

- Analysing for variances between budget and actual figures, including using flexible budget in the analysis, and improving financial performance and financial position.
- Applying to both manufacturing and service businesses.

Students will be able to:

 evaluate proposals based on budgets and suggest recommendations.

1.7 Capital Investment Analysis

- Purpose of capital investment analysis.
- Cash outflows and cash inflows, and applying to scenarios with even or uneven cash flows.
- Analysing capital projects using the (i) payback period; and (ii) net present value methods to support and facilitate decision-making.
- Net present value: Time value of money, compounding interest, present value and future value. Include using weighted average cost of capital as a discount rate. Computing relative proportion of funding based on book value. Computing weighted average cost of capital only, given cost of capital of each source of funding and relative proportion of funding.
- Limitations of the capital investment analysis as well as net present value method for decisionmaking.
- This is not required: Discounted payback period.

- compute cash flows and net cash flow;
- compute payback period and net present value;
- compute relative proportion of funding and weighted average cost of capital; and
- evaluate proposals based on capital investment appraisal and suggest recommendations.

1.8 Relevant Information for Decision-making

- Relevant revenue, relevant cost, sunk cost, and opportunity cost.
- Analysing for the following situations to support and facilitate decision-making:
 - Accept or reject one-time-only special order, product/service, with or without excess capacity in the business.
 - Make (i.e. insourcing) or buy (i.e. outsourcing) a component/product/service with or without excess capacity in the business.
 - Continue or discontinue a product/service with or without excess capacity in the business.
 - Selection between products/services under situation of limited resources in the

- explain relevant income, relevant costs and opportunity cost; and
- evaluate proposals based on relevance of income and costs, and suggest recommendations.

Content	Students will be able to
business and with or without limited market demand.Applying to both manufacturing and service businesses.	
 Limitations of using quantitative information for decision-making. 	

Key Understanding 2: Accounting is a language used to represent business economic activities.

Content	Students will be able to:
 Businesses and Economic Activities 2.1 Types of Businesses Classification of businesses by business objectives: profit-making; non-profit making. Features and differences between such businesses. How business objectives affect business economic activities. Classification of businesses by trade: merchandising; service; manufacturing. Features and differences between such businesses. How the main income generating economic activities of each type of business are represented on the financial statements. This syllabus focuses on profit-making businesses only, of merchandising, service and manufacturing trades. 	 differentiate between businesses in merchandising, services and manufacturing; and differentiate between financia statements of businesses in merchandising, services and manufacturing.
 2.2 Forms of Business Ownerships Types of business ownerships: sole proprietorship; partnership; company. Features and differences between such business ownerships. How the financial statements reflect different forms of business ownerships. 	 differentiate between sole proprietorship, partnership and company; and differentiate between financia statements of sole proprietorship.

partnership and company.

Content	Students will be able to:
 This syllabus focuses on accounting for the company-type of business ownership only. This is not required: Registration requirements of different forms of business ownerships. 	
 2.3 Business Economic Activities Importance of and differences between financing, investing and operating activities. Relationship between these three categories of economic activities. Operating cycle. A business transaction is an economic activity that is to be processed by the accounting function. 	 differentiate between financing, investing and operating activities; explain the relationships between financing, investing and operating activities; and explain the operating cycle.
 Representation and Presentation of Economic Activities 2.4 Elements of Financial Statements Effects of economic activities are classified by their economic characteristics into asset, liability, equity, income and expense. 	 differentiate between assets, liabilities, equity, profit, income and expenses.
 2.5 Accounting Equation Basic accounting equation: assets = equity + liabilities. Expanding the basic accounting equation to include income, expenses, share capital, reserves, non-current assets, current assets, etc. Relating the accounting equation to the financial statements. Effects of economic activities, also alternatively known as business transactions, on the accounting equation and financial statements. 	 compute the values of financial figures based on the accounting equation; and analyse the effects of transactions on the accounting equation.
 2.6 Financial Statements Effects of economic activities, also alternatively known as business transactions, are summarised and presented on financial 	 analyse and present the effects of transactions on the financial statements.

statements.

Content	Students will be able to:
Generally accepted financial statement formats and financial terms other than those shown in the Appendix are also acceptable. This syllabus requires only the preparation of these financial statements: income statement, balance sheet, statement of changes in equity and statement of cash flows.	
 Income Statement: Purpose of the income statement. Preparing an income statement in good form in a narrative format for a merchandising, service or manufacturing business, with or without end of financial period adjustments to be made. Balance Sheet: Purpose of the balance sheet. Preparing a properly classified balance sheet in a narrative format for a 	 differentiate between gross and net profits; and prepare an income statement for merchandising and service businesses. differentiate between non-current and current assets; differentiate between non-current
company, with or without end of financial period adjustments to be made. o Statement of Changes in Equity:	 and current liabilities; and prepare a balance sheet for a company.
 Purpose of statement of changes in equity, with or without end of financial period adjustments to be made. 	 prepare a statement of changes in equity for a company.
 Statement of Cash Flows: Purpose of the statement of cash flows. A statement of cash flows in good form based on the indirect method only. Reconciling between cash and accrual basis of accounting. 	 differentiate between cash inflow and cash outflow activities; differentiate between cash flows from operating, investing and financing activities; and prepare a statement of cash flows.
epresentation and Presentation of Financing	

Representation and Presentation of Financing Activities

2.7 Shareholders' Equity

 Company as a separate legal entity. Shares as the unit of ownership, either privately held or publicly-traded.

- Effects of the following transactions on the accounting equation and financial statements:
 - Issuance of shares: ordinary, cumulative preference and non-cumulative preference shares. Issuing ordinary shares by (i) subscription, (ii) bonus issue, and (iii) rights issue. Computing share capital.
 - Cash buy-back of ordinary shares only.
 - Declared dividends: Dividends on (i) ordinary shares, (ii) cumulative preference shares, and (iii) non-cumulative preference shares. Computing interim dividends and declared dividends.
 - Retained earnings.
 - Asset revaluation reserve: Creation of asset revaluation reserve only.
- Journal entries of transactions relating to the following are not required: Cash buy-back of ordinary shares and asset revaluation reserves.
- Presenting shareholders' equity on the financial statements in accordance with generally accepted accounting practices.
- These are not required: Legal procedures on incorporation of company and declaration of dividends. Preparation of accounts for publication. Accounting for share premium or share discount. No subsequent re-issue of previously bought ordinary shares.

2.8 Long-term and Short-term Borrowing

- Types of borrowings: loan, mortgage and bond.
- Effects of the following transactions on the accounting equation and financial statements:
 - New borrowing.
 - Repayment of borrowing. Computing loan repayment and outstanding loan, based on simple interest method.
 - Interest on borrowing. Computing interest expense and interest payable, based on simple interest method.
- Presenting long-term and short-term borrowing on the financial statements in accordance with generally accepted accounting practices.

Students will be able to:

- compute share capital, dividends, retained earnings and asset revaluation reserve;
- prepare journal entries on transactions relating to share capital, dividends and retained earnings;
- analyse the effects of transactions relating to share capital, dividends, retained earnings and asset revaluation reserve on the accounting equation and financial statements; and
- prepare extracts of financial statements showing the presentation of share capital and reserves.

- compute loan repayment, outstanding loan, interest expense and interest payable;
- prepare journal entries on transactions relating to long-term borrowing;
- analyse the effects of transactions relating to long-term borrowing on the accounting equation and financial statements;
- prepare extracts of financial statements showing the presentation of long-term borrowing; and

 These are not required: How interest rate is charged on the loan, at fixed or floating rate.
 Apportionment of loan repayment into amounts for repayments of principal sum and interest. Banking operations, such as opening a

Representation and Presentation of Investing Activities

2.9 Property, Plant and Equipment

- Purpose of property, plant and equipment.
- Effects of the following transactions on the accounting equation and financial statements:
 - Acquisition of assets:

loan account.

- Cost of asset. Acquiring assets on cash term or credit term or by trading-in a used asset.
- Incurring subsequent costs relating to the asset: capital and revenue expenditure, and applying the materiality concept.
- Depreciation:
 - Causes and definition of depreciation.
 - Depreciation methods of: (i) straightline method, and (ii) reducing-balance method. Computing depreciation, with partial or full year of depreciation in year of acquisition or disposal. Computing accumulated depreciation and net book value.
 - Effects of changing depreciation rate, useful life, scrap value and depreciation method.
- Revaluation of assets:
 - Understanding revalued amount.
 - Adjusting net book value to revalued amount. Include upward and downward revaluations, and over two financial periods only.
 - This is not required: Derivation of revalued amount.
- Impairment of assets:
 - Understanding recoverable amount.

Students will be able to:

 explain the representation of longterm and short-term borrowing, and their presentation on the financial statements in relation to accounting theory.

- explain depreciation, useful life and causes of depreciation;
- suggest appropriate depreciation method for a class of property, plant and equipment;
- differentiate between capital and revenue expenditure, with application of the materiality concept;
- analyse the effects of transactions relating to reclassification of capital and revenue expenditure on the accounting equation and financial statements;
- compute cost of property, plant and equipment, accumulated depreciation and net book value, and depreciation rate and depreciation;
- prepare journal entries on transactions relating to acquisition and depreciation of property, plant and equipment;
- analyse the effects of transactions relating to changing depreciation charged on the accounting equation and financial statements;
- compute adjustments relating to revaluation and impairment loss of property, plant and equipment;
- analyse the effects of transactions relating to revaluation and impairment of property, plant and equipment on the accounting equation and financial statements;

- Adjusting net book value to recoverable amount.
- These are not required: Derivation of recoverable amount. Subsequent reversal of impairment loss is not required.
- Sale of assets:
 - Gain or loss on sale of asset, carried at cost or revalued cost, from a sale or trading-in for a new asset.
 - This is not required: Disposal of asset.
- Journal entries of transactions relating to the following are not required: Revaluation of assets and impairment of assets.
- Presenting property, plant and equipment on the financial statements in accordance with generally accepted accounting practices.

Representation and Presentation of Operating Activities

2.10 Income and Expenses

- Income and expenses in relation to the main income generating activities of the business.
- Types of other income not earned from the main income generating activities of the business.
- Types of expenses incurred in generating income.
- Effects of the following transactions on the accounting equation and financial statements:
 - Sale of goods on cash and credit term.
 Calculating trade discount. Inventory recorded based on the perpetual inventory recording method only.
 - Providing services on cash and credit term.
 - Other income. Adjusting for income receivable and income received in advance/unearned income.
 - Expenses. Adjusting for accrued expenses/ expenses payable and prepaid expenses.

2.11 Inventories

 Inventories in merchandising and manufacturing businesses. Materials or

Students will be able to:

- compute gain/loss on sale of property, plant and equipment;
- prepare journal entries on transactions relating to sale of property, plant and equipment;
- analyse the effects of transactions relating to sale of property, plant and equipment on the accounting equation and financial statements;
- prepare extracts of financial statements showing the presentation of property, plant and equipment; and
- explain the representation of property, plant and equipment, and their presentation on the financial statements in relation to accounting theory.
- compute earned and unearned portions of income, and expired/consumed and unexpired/unconsumed portions of expenses;
- prepare the journal entries on transactions relating to income and expenses;
- analyse the effects of transactions relating to income and expenses on the accounting equation and financial statements;
- prepare extracts of financial statements showing the presentation of income and expenses; and
- explain the representation of income and expenses, and their presentation on the financial statements in relation to accounting theory.

- supplies to be consumed in the provision of services in a services business.
- Effects of the following transactions/ adjustments on the accounting equation and financial statements:
 - Purchase of inventories:
 - Cost of inventories. Purchasing inventories on cash and credit term. Inventory recorded based on the perpetual inventory recording method only.
 - Sale of inventories:
 - Inventory recorded based on the perpetual inventory recording method only.
 - Physical flow and cost flow of inventories, and the need for an inventory costing method. Computing cost of goods sold and ending inventories, based on the inventory costing methods of (i) FIFO, and (ii) weighted average.
 - Adjusting between inventory costing methods of (i) FIFO, and (ii) weighted average.
 - Valuation of ending inventories and impairment of assets:
 - Understanding net realisable value.
 - Adjusting ending inventories to net realisable value.
 - This is not required: Derivation of net realisable value.
- Presenting inventories on the financial statements in accordance with generally accepted accounting practices.
- This is not required: Use of stock card.

2.12 Trade Receivables and Other Receivables

- Effects of the following transactions on the accounting equation and financial statements:
 - Sale of goods on credit term, and related transactions.
 - Providing services on credit term, and related transactions.

Students will be able to:

- compute cost of inventories at purchase, cost of sales, ending inventories and impairment loss;
- prepare journal entries on transactions relating to inventories;
- analyse the effects of transactions relating to inventories on the accounting equation and financial statements;
- prepare extracts of financial statements showing the presentation of inventories; and
- explain the representation of inventories, and their presentation on the financial statements in relation to accounting theory.

compute trade receivables, allowance for impairment of trade receivables, net trade receivables and impairment loss on trade receivables;

- o Impairment of trade receivables: Allowance for impairment of trade receivables is based on amounts owed from customers whose debts may not be collectible in the immediate future or based on a percentage of trade receivables. Allowance may be created for the first time, and adjusted in subsequent financial periods.
- Presenting trade receivables on the financial statements in accordance with generally accepted practices.
- This is not required: Use of detailed ageing of trade receivables.

2.13 Trade Payables and Other Payables

- Effects of the following transactions on the accounting equation and financial statements:
 - Purchase of goods on credit term, and related transactions.
 - Purchase of services provided on credit term, and related transactions.
- Presenting trade payables on the financial statements in accordance with generally accepted accounting practices.

2.14 Cash in Hand and Cash at Bank

- Effects of the following transactions on the accounting equation and financial statements:
 - Cash receipts
 - Cash payments
 - Bank related transactions
- Bank reconciliation.
- Presenting cash in hand/cash at bank on the financial statements in accordance with generally accepted accounting practices.

Students will be able to:

- prepare journal entries on transactions relating to trade receivables;
- analyse the effects of transactions relating to trade receivables on the accounting equation and financial statements;
- prepare extracts of financial statements showing the presentation of trade receivables; and
- explain the representation of trade receivables and other receivables, and their presentation on the financial statements in relation to accounting theory.
- compute trade payables;
- prepare journal entries on transactions relating to trade payables;
- analyse the effects of transactions relating to trade payables on the accounting equation and financial statements;
- prepare extracts of financial statements showing the presentation of trade payables; and
- explain the representation of trade payables and other payables, and their presentation on the financial statements in relation to accounting theory.
- prepare journal entries on transactions relating to cash in hand/cash at bank;
- analyse the effects of bank reconciliation items on balance on the bank statement;
- analyse the effects of transactions relating to cash in hand/cash at

Content	Students will be able to:	
 Not required: Descriptions of how of electronic bank transactions are processed. 	 bank on the accounting equation and financial statements; prepare extracts of financial statements showing the presentation of cash in hand/cash at bank; and explain the representation of cash 	
	in hand/cash at bank, and their presentation on the financial statements in relation to accounting theory.	
Correcting Accounting Errors and Re-construction of Accounts		
2.15 Correcting Accounting Errors		
 Checking for arithmetic accuracy using a trial balance. 	 prepare journal entries to correct accounting errors; 	
 How accounting errors not revealed by the trial balance are created. 	 analyse the effects of accounting errors on the accounting equation 	
 Effects of accounting errors and their corrections, in journal entries and on financial 	and financial statements;analyse the effects of correcting	
statements.This is not required: Use of suspense account. Errors revealed by a trial balance.	accounting errors on the accounting equation and financial statements; and	
	 prepare corrected profit and financial statements. 	
 2.16 Incomplete Records Using the following techniques to derive financial items: 	 re-construct net profit from changes in net assets; 	
 Capital comparison method: 	re-construct sales revenue,	
Relationship between net profit and change in net assets between two points in time, with or without end of financial period adjustments to be made. Assertate analysis method:	inventory purchased, cost of sales, expenses, other income, gain/loss on sale of property, plant and equipment from changes in relevant balance sheet items	
Accounts analysis method:Relationships between financial items	and/or relevant financial ratios;	
on the financial statements.	- compute loss in inventory from	
Financial ratios method: A Polationalina between financial items.	changes in relevant balance sheet items and/or relevant financial	
 Relationships between financial items on the financial statements as expressed by financial ratios. 	ratios; and	
	 prepare the balance sheet and income statements based on incomplete records. 	

Key Understanding 3: Accounting is a measurement system of business economic activities.

Financial Accounting Accounting Assumptions and Principles 3.1 Accounting Principles Accounting principles, and the implications they have on the representation and presentation of economic activities: Accounting entity, also known as business entity concept Going-concern	 explain the representation or economic activities and their presentation on the financia statements in relation to accounting theory;
 Monetary Historical cost Objectivity Accounting period Accrual Matching Consistency Materiality Prudence Relating relevant accounting principles to business ethics. Limitations of accounting as a measurement system in relation to the following aspects only: Measuring economic activities in monetary terms, and limitations of quantifiable financial information for decision-making. Historical cost vs. alternative valuation methods, and limitation of historical cost information for decision-making. Accounting Information System and Accounting Cycle 3.2 Accounting Information System and 	 explain the accounting theory in relation to business and professional ethics, and vice versa; and explain the limitations of accounting as a measurement system in relation to decision-making.

recorded,

systematically

processed and organised into information.

activities

the accounting cycle.

Content	Students will be able to:
Business economic activities are also known as business transactions during the process. Components of the accounting information system. Source documents: receipt, invoice, credit and debit note, payment voucher and bank statement. Specifics about the accounting information system are not required, such as recording source documents, posting to journals and ledgers, closing of ledger accounts, preparation of trial balance, etc.	
 Understanding the accounting cycle and its role in the preparation of financial statements. 	
 3.3 Double-entry Recording The double-entry recording rule. Representing double-entry effects as journal entries and ledger entries. 	 prepare journal entries.
 Understanding the entries recorded in a columnar ledger account. 	
 This is not required: Preparing ledgers. 	
Accounting Measurements 3.4 Measuring Economic Activities ■ Purpose of measuring economic activities: □ Measuring Performance: □ Profit/loss as measurement of performance. □ Computing gross profit/loss and net	 compute gross profit/loss and net profit/loss; compute total assets, total liabilities, total equity and net assets; and compute cash flows from operating, investing and financing activities.
 profit/loss. Measuring Financial Position: Total assets, total liabilities and total equity as measurements of financial position. Net assets/net worth as claim of shareholders on the company. Computing total assets, total liabilities, total equity and net assets. Relationship between net assets, change in equity and net profit. Measuring Cash Flows: 	
 Measuring Cash Flows: Cash flows from financing, investing and operating activities as 	

Content	Students will be able to:
measurements of cash flow for a period of time.	
 Computing cash flows from operating, investing and financing activities. 	
 Relationship between cash flows and items on the balance sheet. Relationship between cash flows and net profit. 	
Managerial Accounting	
Accounting Measurements 3.5 Measuring Costs of Products, Services and Other Cost Objects	
Purpose of measuring cost objects.	identify and differentiate direct an
Understanding that internal stakeholders consider cost as the resource given up in order	indirect costs for a given product of service; and
to achieve a specific objective. Cost Objects and Cost Assignment:	 select the appropriate cost-allocation base for a given manufacturing
 Understanding what cost objects are. This syllabus includes these cost objects only: a product or a service. 	overhead and product or service.
 Relationship of costs to cost object: direct and indirect. 	
 Cost assignment. 	
 Cost-allocation bases. Computing plant and department cost-allocation rates. 	
 Apply understanding to manufacturing and service businesses. 	
3.6 Cost Flow in a Manufacturing Business	
Cost flow and the accompanying computation in terms of units and values of materials, work-in-progress and finished goods in a manufacturing business. Computing total manufacturing costs.	 prepare income statement ar schedule of cost of good manufactured and income statement of a manufacturing business.
Prime cost and conversion cost.	
Preparing a schedule of cost of goods	

manufactured, and income statement of a

Journal entries on cost flow are not required.

manufacturing business.

Students will be able to: Content **Normal Job-costing System** Cost object in job-costing is a unit or multiple compute direct material cost, direct units of a distinct product or service. manufacturing labour cost and allocated manufacturing overheads Normal job-costing system only. Apply for one or multiple products; understanding to costing a service as well. Understanding how under and over applied compute direct material cost, direct overhead arises, and the financial effect on labour cost and allocated overheads the accounting equation and financial for one or multiple services: statements. explain how under and over applied • These are not required: Journal entries overhead arises; and relating to job-costing. Job cost sheet, and analyse the effect of under and over treatment of under and over applied applied overhead on the accounting overheads. Process-costing system. equation and financial statements. **Budgeting** 3.8 • Fixed budget and flexible budget. prepare budgets. Preparing the following budgets: Sales budget in units and value Production budget in units and value Raw materials purchased in units and value Direct labour in hours and value Production overhead in value

Expenses budget

sheet

Budgeted cash budget

Applying to multiple financial periods.

Budgeted income statement and balance

SUGGESTED RESOURCES:

	Title	Authors	Publisher
Fin	ancial Accounting only		
1	Fundamental Financial Accounting Concepts	Thomas P. Edmonds, Frances M. McNair, Philip R. Olds and Edward E. Milam	McGraw-Hill Irwin, 2016
2	Financial Accounting: Global Edition: International Financial Reporting Standards	Walter T. Harrison, Charles Horngren, Bill Thomas and Themin Suwardy	Pearson, 2013
3	Intermediate Accounting	J. David Spiceland, James F. Sepe and Mark W. Nelson	McGraw-Hill Irwin, 2015
<u>Ma</u>	nagerial Accounting only		
4	Management Accounting for Decision Makers	Peter Atrill and Eddie McLaney	Pearson, 2015
5	Managerial Accounting, Global Edition	Karen W. Braun and Wendy M. Tietz	Pearson, 2014
6	Managerial Accounting	Ray Garrison, Eric Noreen and Peter Brewer	McGraw-Hill Irwin, 2015
7	Managerial Accounting: Creating Value in a Dynamic Business Environment	Ronald Hilton and David Platt	McGraw-Hill Irwin, 2014
8	Cost Accounting, Global Edition	Madhav Rajan, Srikant M. Datar and Charles T. Horngren	Pearson, 2014
9	Managerial Accounting	Stacey Whitecotton, Robert Libby and Fred Phillips	McGraw-Hill Irwin, 2011
<u>Fin</u>	ancial Accounting and Managerial Ac	<u>counting</u>	
10	Survey of Accounting	Thomas P. Edmonds, Christopher T. Edmonds, Philip R. Olds, Frances M. McNair and Bor-Yi Tsay	McGraw-Hill Irwin, 2015
11	College Accounting	John Ellis Price, M. David Haddock, Jr., and Michael J. Farina	McGraw-Hill Irwin, 2015
12	Fundamental Accounting Principles: Including International Financial Reporting Standards (IFRS)	John J. Wild, Winston Kwok, Sundar Venkatesh, Ken W. Shaw and Barbara Chiappetta	McGraw-Hill Irwin, 2016
13	Financial and Managerial Accounting: Information for Decisions	John J. Wild, Ken W. Shaw and Barbara Chiappetta	McGraw-Hill Irwin, 2012

SECTION 3: PEDAGOGY

- 3.1 CONSTRUCTIVIST PEDAGOGIES
- 3.2 Nature of Accounting Knowledge
- 3.3 STRENGTHENING THE STRATEGIES FOR PRINCIPLES OF ACCOUNTING
 - 3.4 Connecting the User and Preparer Perspectives

3. PEDAGOGY

3.1 CONSTRUCTIVIST PEDAGOGIES

A more constructivist classroom would help encourage the habit of understanding from first principles, determining the "why" and "how" behind the subject knowledge and studying how this knowledge has evolved. Fosnot (2005) summarised that the development of cognition and deep understanding is the emphasis of a constructivist view of learning, rather than the attainment of behavior or skills as in the behaviourist view of learning. Fosnot (2005) further suggested the following general principles of learning based on constructivist pedagogy:

- Students should be allowed to generate questions. They should also be encouraged to voice their conceptions of how things work, and to discuss and defend the viability of their conceptions.
- Students' errors are opportunities offering insights into their conceptions of how things work. Outcomes that contradict students' expectations are avenues for students to reexamine and explore their conceptions. To elicit such learning opportunities, challenging meaningful tasks are to be used.
- Humans endeavor to make meaning by reflecting on, connecting and generalising their experiences. Strategies that have students thinking through their experiences or sharing them with others should be introduced.
- Individually, the student only has access to his/her own thoughts and conceptions. But
 interactions and discourse with others, where he/she has chances to seek clarification of
 others' views, while sharing and defending his/her own ideas, will further enrich his/her
 thinking.

3.2 Nature of Accounting Knowledge

A common misconception is to assume that accounting is all about mastering the procedural and technical system of doing accounts, or memorising and completing accounting formats. However, accounting knowledge actually comprises three layers of knowledge — contextual, procedural and conceptual knowledge. Accounting represents economic activities in a numerical form. By themselves, accounting numbers have no meaning; the numbers are only meaningful when interpreted in the context of the economic activities of the business. As business economic activities are immense and multifarious, a systematic procedure of organising and recording the accounting numbers is needed. The accounting constructs used to represent and measure business economic activities form the bedrock of how accounting numbers are to be understood, conceptualised and interpreted.

Table 4, on the following page, further elaborates on the three layers of accounting knowledge and suggests associated instructional approaches.

T 1 1 4 C	C A		
Table 4: Summary	of Accounting	Knowledge and Suggested	I Instructional Approaches

Accounting Knowledge	Suggested Instructional Approaches
 Contextual Knowledge involves: the environment that accounting functions in; business objectives and activities; and the larger business environment. 	 Broad objective of approach: Connect what students learn in class with the real business world. To provide the business context: Relate to students' prior experiences: As most students would have some encounters with businesses, frame and invoke these prior experiences. Create the experiences: Through the use of authentic materials and direct or indirect exposure to real businesses, develop relevant business knowledge in students.
Procedural Knowledge involves: accounting conventions and terminologies; anddouble-entry rule.	 Broad objectives of approach: Attain an acceptable level of proficiency in understanding and executing the double-entry method of recording. Attain an acceptable level of understanding how information flows through the accounting information system. To master the procedures until they can be executed with ease and confidence: Master learning through modelling, stepped demonstrations of the procedures, and adequate guided and independent practices. Learning is to be carefully designed from simple to complex, and should integrate previously taught procedures and principles.
 Conceptual Knowledge involves: manner of organising and relating the theories and concepts to represent and think about business economic activities; and the way business economic activities are perceived. 	 Broad objectives of approach: Appreciate the way accounting knowledge is represented, organised and related to business economic activities. Make meanings and connections between theories, concepts and business economic activities. To organise, relate and model thinking: Induce thinking using the teaching models of exposition, inquiry, self-discovery, etc. Explicate an expert way of thinking and approach to problem solving. Monitor how students' understanding is formed.

3.3 STRENGTHENING THE STRATEGIES FOR PRINCIPLES OF ACCOUNTING

In line with a more constructivist stance on learning, it is suggested that case studies be used in the teaching and learning of Principles of Accounting. The use of case studies will complement and enrich the existing repertoire of strategies. However, it is not the intent of this document to outline the entire range of strategies that could be used in the teaching and learning of Principles of Accounting. Instead, this document will focus on the use of case studies and the four classroom strategies of questioning, processing, connecting and reflecting. Details are provided in subsequent sections.

Using Case Studies

Students gain a deeper understanding of concepts by working through a case study than by reading a book or passively listening to a lecture. Case studies were first introduced at business school and their use has an established history.

A case is a story about a situation that an individual or a group has to resolve through rules analysis and application, making a decision or an evaluation, or solving a problem.

Cases range from short and simple, such as news-clips or news articles, to extended and complex, such as specifically-developed cases or evolving cases centred on a single business. Cases can be based on real-world events or fictitious but realistic situations.

Cases can be complete or incomplete: a complete case fully describes the situation, including its resolution; an incomplete case presents the situation but withholds the outcome. They can be open-ended, with multiple possible solutions or actions; or closed-ended, where there is only one solution. An open-ended case is suitable for encouraging students to generate and evaluate different possibilities, while a closed-ended case is better used to assess students' understanding of facts and principles. Cases may be analytic or beyond analytic: an analytic case requires students to analyse the situation, describe the key features and assess the merits of the actions taken by the protagonist(s); a beyond-analytic case centres on a dilemma, and requires students to not only analyse the situation, but go one step further and suggest possible solution(s).

There are no hard and fast rules on how case studies are to be used; they can be creatively adapted and used for teaching and learning in a variety of ways. Table 5, on the following page, outlines some guidelines on the use of case studies in the teaching and learning of Principles of Accounting.

Features of cases

Teaching and Learning of topics in KU1

Cases involving decisions are recommended for these topics in KU1:

- 1.2 Business Ethics
- 1.5 Cost-volume-profit Analysis
- 1.6 Variance Analysis
- 1.7 Capital Investment Appraisal
- 1.8 Relevant Information for Decision-making

Cases involving evaluations are suitable for these topics in KU1:

- 1.3 Qualitative Characteristics of Useful Financial Information
- 1.4 Financial Statements Analysis

A good source of real-world cases to support the teaching and learning of Financial Statements Analysis is the annual reports of listed companies, which are readily available from the Singapore Stock Exchange website.

Choose cases that have complete descriptions of the situation so that it is easier to evaluate if the complexity level of each case matches students' abilities. Closed to limited-open cases are more suitable as their accounting solutions are finite.

Most topics in KU1 would be analytic cases. However, the topic on Business Ethics could be beyond analytic (i.e. cases involving ethical dilemmas which require solutions).

Teaching and Learning of topics in KU2 and KU3

Cases involving rules analysis are suitable for some of the topics in KU2 and KU3, particularly **2.7** Shareholders' Equity to **2.16** Incomplete Records, **3.7** Normal Job-costing System and **3.8** Budgeting. An expanded structured problem could be modified into a case for the above-mentioned topics.

Supportive learning environment for teaching and learning using case studies

Using case studies to illustrate or support a lecture or seminar or tutorial

Case studies can be used to illustrate or support a lecture or seminar or tutorial, so as to outline typical problems and model how concepts are applied, analysis is made and evaluations are given. Case studies can be used in the following ways:

- Mini case studies can be used during the lecture to contextualise the lecture materials being presented.
- Mini case studies can be used in subsequent seminars or tutorials for students to apply or consolidate what was learnt during the lecture.

Lectures can be enlivened with strategies that increase student-student or teacher-student interactions (e.g. lecturer posing questions to students; allowing students to raise questions and/or respond to questions from their peers; and using ICT-mediated classroom participative tools). Seminars and tutorials should adopt collaborative or co-operative strategies or teacher-facilitated discussions (University of Bristol, 2002/2005).

Using case studies in case method teaching

In case method teaching, the case study is the primary task that students' analytical efforts are directed at. Longer case studies are suitable and are to be used as follows (University of Bristol, 2002/2005):

- The case study is used as a form of teacher-led inquiry students generate a list of questions regarding a case that is introduced before they learn the content. Content knowledge introduced in subsequent sessions is then related back to the case and the student-generated questions.
- The case study is used to apply and integrate learning after the content is learnt. As the case is extensive, it requires students' protracted efforts to analyse.

Strategies to create student engagement

In a constructivist classroom, students should be given opportunities to present, explain, discuss and defend their analysis results, evaluations or recommendations. The teacher's role is to facilitate and organise students' discussions, including providing leading questions to spark off or move along students' discourse. A safe and positive learning environment, where differing views are valued and respected and mistakes are seen as learning opportunities, should pervade.

To further enrich the use of case studies, strategies and frameworks that would help to structure students' discussions can be adopted (e.g. debate, Socratic questioning, Paul and Elder's (1996) elements of reasoning). Role-play can be introduced for students to delve into the frames of mind of protagonists in the case. When having students work collaboratively, collaborative and cooperative learning strategies should be used.

Teachers should also ensure that students have the prerequisite skills, such as reading comprehension and constructing arguments, to effectively work on case studies. While an authentic case is intriguing, teachers should also check if students are focusing excessively on the context, rather than on the case materials on which they are to apply their analytical skills and content knowledge.

Limitation of using case studies

The benefits of using case studies may be limited for many of the topics in KU2 and KU3, as they are centred on learning the rules or procedures of accounting. It would thus be more efficient to use other instructional methods for the following topics:

- 2.1 Types of Businesses
- 2.2 Forms of Business Ownerships
- 2.3 Business Economic Activities
- 2.4 Elements of Financial Statements
- 2.5 Accounting Equation
- 2.6 Financial Statements
- 3.1 Accounting Principles
- 3.2 Accounting Information System and Accounting Cycle
- 3.3 Double-entry Recording
- 3.4 Measuring Economic Activities
- 3.5 Measuring Costs of Products, Services and Other Cost Objects
- 3.6 Cost Flow in a Manufacturing Business

Using Questioning, Processing, Connecting and Reflecting Strategies

An effective lesson is made up of cognitive events that are necessary for learning, or that facilitate learning for students. In such an environment, the teachers and students have specific roles to play, and work together to promote teaching and learning. Every instruction and activity that the teacher provides and initiates should be intentional and purposeful. On their part, the students are not receiving instruction passively; they are actively working on the learning materials, and linking them to prior learning. They are actively creating their knowledge and owning it. The teacher's role is to facilitate and support students' learning. Figure 3, on the following page, outlines the cognitive events that occur in such a learning environment (Smith and Ragan, 2005).

	Students generate	Instructor generates
Introduction	activate attention, establish purpose, arouse interest and motivation	gain attention, inform purpose, stimulate interest and motivation
Body	recall prior knowledge, process information, employ learning strategies, practise, evaluate feedback	stimulate recollection of prior knowledge, present information and examples, guide or prompt use of learning strategies, provide for and guide practice, provide feedback
Conclusion	summarise and review, transfer learning	provide a summary and review, enhance transferred learning

Figure 3: Organisation of a Learning Environment with Cognitive Events

Four strategies that need to be practised in every lesson to bring about purposeful and engaged learning are: questioning; processing; connecting; and reflecting (Francis, Mulder and Stark, 1995). Table 6 outlines these strategies.

Table 6: Summary of Strategies of Questioning, Processing, Connecting and Reflecting at the Lesson Level

Strategy	Purpose	Student's Role	Teacher's Role
Questioning	 arouse interest provide focus for learning prepare for learning probe and develop deep understanding 	active questioning	encourage questioningguide the discussion
Processing	 process and practice apply and demonstrate learning 	 accomplish learning outcomes 	 demonstrate and guide create opportunities for students to deepen and demonstrate learning provide feedback
Connecting	 gain deeper understanding see relevance of learning in authentic contexts 	 extract meaningful patterns discern purposes detect key conceptual threads relate learning to real world 	 evoke, uncover and guide students to draw connections
Reflecting	self-directed learning	be conscious of thinking processesreview and reflect on learning	 encourage, lead and guide

Questioning

Questioning is a universal teaching strategy. It is used to arouse students' interests, focus their learning, prepare them to acquire new concepts, as well as help them to probe and develop a deeper understanding. Questioning presupposes that teachers are interested in what students know and how they think, and that students are interested in what others know and how they think. Good questions help to develop students' thinking and correct their misconceptions.

Processing

Students need to process, practise and apply their learning to different contexts, so as to gain a deeper understanding of the knowledge and develop competency in using the skill. Processing is not rote learning nor memorisation of procedures. Through demonstration and modeling, the emphasis is to explicate the thinking behind the procedures – the whys and why nots – not the completion of the procedures themselves. During the process, feedback is provided.

Connecting

Connecting entails relating to students' prior life experiences, or providing the necessary life experiences, so as to help students create personal meaning in what they are learning. Connecting also means relating learning to the real world, so that learning is not seen as a phenomenon independent of everyday reality; rather, it is part and parcel of living or preparing for future living and work. Lastly, connecting also means achieving cognitive clarity and developing a schema of learning.

Reflecting

Students who are reflective become conscious of their thinking and are better able to direct their efforts for purposeful learning. Reflection promotes integration of learning. Students should be offered opportunities to discuss and defend what they have learned so that they can reflect upon their mental models, discover their misconceptions and correct them. Engaging in such mental activities will increase cognitive flexibility and retention of information.

Overview

Pedagogical knowledge is to be closely related to content knowledge to create an effective and engaging learning environment. Figure 4, on the following page, summarises how the suggested strategies could be used to deliver the Principles of Accounting content knowledge.

Key Understanding 1:

Accounting information is used to support and facilitate decision-making.

Students learn to be users of accounting information.

Strategies:

Without any or limited prior learning of the content:

- conduct teacher-led inquiry, whereby knowledge and skills are introduced "just-in-time" to make the decision;
- conduct student-initiated inquiry to explore and discover for themselves the knowledge and skills needed to make the decision; and/or
- use case studies to activate learning (i.e. explore new learning using a case study).

Classroom strategies:

questioning; processing; connecting; reflecting

Key Understanding 2:
Accounting is a language used to represent business economic activities.

Key Understanding 3:
Accounting is a measurement system of business economic activities.

Students learn to be preparers and communicators of accounting information.

Strategies:

KU2 and KU3 concern understanding and mastering accounting procedures. It is not efficient nor effective to use case studies to front the learning of procedures. Students will better learn the content through other instructional strategies first. Case studies can then be used to consolidate learning (i.e. to apply and integrate or deepen learning).

Classroom strategies:

questioning; processing; connecting; reflecting

Figure 4: Use of Suggested Pedagogies in Principles of Accounting

3.4 CONNECTING THE USER AND PREPARER PERSPECTIVES

The user and preparer perspectives of accounting are two sides of the same coin.

A narrow focus on the preparer perspective of accounting will not help students to understand the purpose of accounting treatments and procedures. Instead, students become engrossed in the forms of accounting, memorising formats and procedures. The result is a superficial understanding of accounting. Linking the preparer perspective closely to the user perspective will help students gain a deeper understanding of accounting and to understand that a preparer of accounting information has an important role in supporting business decision-making.

Students should be led to understand that it is the users' expectations of what information would be useful, and therefore needed, that would drive the work of the preparer. A more macro understanding of what drives the assumptions, principles, rules and procedures of accounting would better serve students in the long run. An understanding of who the users of accounting information are and the decisions they make should be at the foreground of teaching and learning Principles of Accounting.

It is suggested that the group of topics shown below in Table 7 are best taught with close interconnections explicitly highlighted, so that students can achieve a more integrated and deeper understanding of accounting.

<u>Table 7</u>: Topics to be Taught in Close Inter-connections

	KU 1	KU 2 and KU 3
1.4	Financial Statements Analysis	2.6 Financial Statements3.4 Measuring Economic Activities
1.1 1.2 1.4	Stakeholders and Decision-making Business Ethics Financial Statements Analysis	2.7 Shareholders' Equity 2.16 Incomplete Records
1.1 1.2 1.4	Stakeholders and Decision-making Business Ethics Financial Statements Analysis	2.8 Long-term and Short-term Borrowing
1.1 1.2 1.4	Stakeholders and Decision-making Business Ethics Financial Statements Analysis	2.9 Property, Plant and Equipment2.16 Incomplete Records
1.1 1.2 1.4	Stakeholders and Decision-making Business Ethics Financial Statements Analysis	 2.10 Income and Expenses 2.11 Inventories 2.12 Trade Receivables and Other Receivables 2.13 Trade Payables and Other Payables 2.14 Cash in Hand and Cash at Bank 2.16 Incomplete Records

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SECTION 4: ASSESSMENT

4.1 THE A-LEVEL H2 PRINCIPLES OF ACCOUNTING NATIONAL EXAMINATION

4. ASSESSMENT

4.1 THE A-LEVEL H2 PRINCIPLES OF ACCOUNTING NATIONAL EXAMINATION

Assessment Objectives

The design of the national examination begins with the development of assessment objectives, because although the syllabus begins with a set of syllabus aims described in Section 1.3, not all desired student outcomes are to be assessed. Instead, the assessment objectives explicate what are to be assessed in the A-level H2 Principles of Accounting national examination. The assessment objectives are broadly based on Bloom's Taxonomy (Bloom, Engelhart, Hill, Furst, & Krathwhol, 1956), which categorises mental acts or thinking resulting from educational experiences into a hierarchy of increasingly complex behaviour (Moseley et al., 2005). An inference drawn from the Taxonomy is that each higher level of mental act demands higher ordered skills and abilities (ibid).

In the H2 Principles of Accounting national examination, candidates are expected to demonstrate the following:

AO1 Knowledge and Understanding

Demonstrate knowledge and understanding of accounting principles and practices related to the representation, measurement and presentation of business economic activities.

AO2 Application

Select and apply relevant knowledge and understanding of accounting to given scenarios.

AO3 Analysis and Synthesis

Analyse, interpret, organise and synthesise accounting information appropriately, and communicate it in a clear and coherent manner.

AO4 Evaluation

Evaluate accounting information to make informed judgements, recommendations or decisions.

Schemes of Assessment

Assessment Format

The examination consists of two papers, Paper 1 and Paper 2, taken at separate sittings.

Table 8: Assessment Format of the H2 Principles of Accounting National Examination

	Description	Duration	Weighting
Paper 1	This paper will test Financial Accounting. Section A (60 marks, 30%) 3 compulsory structured questions (20 marks each)	3 hours	50%
	Section B (40 marks, 20%) 1 compulsory scenario-based structured question (40 marks)		
Paper 2	This paper will test Managerial Accounting. Section A (60 marks, 30%) 3 compulsory structured questions (20 marks each) Section B (40 marks, 20%) 1 compulsory mini-case study (40 marks)	3 hours	50%

Description of Components

Paper 1

Paper 1 will focus on Financial Accounting and will have two sections: Section A and Section B.

Section A will have three compulsory structured questions. Each question will carry 20 marks and will be based mainly on one of the financial accounting topics of the syllabus but, where required, will integrate knowledge from other related topics of financial accounting. Each question in this section will begin with introductory information in a given context or scenario. Introductory information will be in the form of text and may include quantitative data. This will be followed by one or more part-questions. Additional information may be introduced for some part-questions. Each question may have up to five part-questions.

Section B will have one compulsory scenario-based structured question from financial accounting topics of the syllabus. The question will carry 40 marks and it will contain more detailed information and be based on more than one topic of the syllabus than the questions in Section A. Additional information may be introduced for some part-questions. Candidates may be required to integrate knowledge from the different topics. The number of part-questions in this section will vary based on the context or the scenario.

In both sections, candidates may be expected to examine the information provided and consider its relevance for use in their responses. The questions will assess candidates' knowledge and understanding of financial accounting, and also their ability to apply financial accounting principles and practices to analyse, synthesise and evaluate situations.

Paper 2

Paper 2 will focus on Managerial Accounting and will have two sections: Section A and Section B.

Section A will have three compulsory structured questions. Each question will carry 20 marks and will be based mainly on one of the managerial accounting topics of the syllabus but, where required, will integrate knowledge from other related topics of managerial accounting. As in the case of Paper 1, each question in this section will begin with introductory information in a given context or scenario. Introductory information will be in the form of text and may include quantitative data. This will be followed by one or more part-questions. Additional information may be introduced for some part-questions. Each question may have up to five part-questions.

Section B will have one compulsory mini-case study based on managerial accounting topics in the syllabus. The case materials, excluding part-questions, will be about one to two pages long and will comprise a detailed write-up about a given context or a scenario including any relevant quantitative data. The mini-case study may integrate concepts from more than one managerial accounting topic and would require candidates to process the information as a whole to identify and understand the issues involved. Candidates may be required to integrate knowledge from the different topics. The number of part-questions that follow a mini case study will depend on the issues involved.

In both sections, candidates may be expected to examine the information provided and consider its relevance for use in their responses. The questions will assess candidates' knowledge and understanding of managerial accounting, and also their ability to apply managerial accounting principles and practices to analyse, synthesise and evaluate situations.

Assessment Specification Grid

Table 9: Assessment Specification Grid

AO1 Knowledge AO2 and Application Understanding		AO3 Analysis and Synthesis	AO4 Evaluation	Total	
Paper 1	10%	15%	15%	10%	50%
Paper 2	10%	15%	15%	10%	50%
Total	20%	30%	30%	20%	100%

The skills are weighted to give an indication of their relative importance. They are not intended to provide a precise statement of the number of marks allocated to particular skills.

Use of Calculators

The use of a calculator approved by the Singapore Examinations and Assessment Board is allowed for both papers.

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APPENDICES

APPENDIX A: LIST OF FORMULAE

APPENDIX B: FORMATS OF FINANCIAL STATEMENTS

LIST OF FORMULAE

Other generally accepted formulae of the financial ratios shown in this Appendix are also acceptable.

1 Financial Ratios

(a)	Analysing for profitability and
	continual operations

(i)	Gross profit margin (%)	 Gross profit		100
		 Net sales revenue	— х	100

(ii) Mark-up on cost (%) =
$$\frac{\text{Gross profit}}{\text{Cost of sales}}$$
 x 100

For company, total equity is the shareholders' equity which comprises issued capital and reserves.

(b) Analysing for liquidity and going concern

- (i) Working capital = Total current asets Total current liabilities
- (ii) Working capital ratio = Total current assets
 or Current ratio = Total current liabilities
- (iii) Quick ratio or Acid test ratio = Total quick assets

 Total current liabilities

Quick assets = Cash + Net current receivables + Shortterm investments

Or

Quick assets = Total current assets - Inventory - Prepayments

(c) Analysing for efficient use of assets

(i)	Cash conversion cycle or Working capital cycle (days)		Days-sales-in-inventory + Accounts receivable period – Accounts payable payment period	e collection	
(ii)	Days-sales-in-inventory (days)		Average inventory		365
		=	Cost of sales	Х	days
(iii)	Rate of inventory turnover		Cost of sales		
	(times)	=	Average inventory		
(iv)	Accounts receivable collection	=	Average net accounts receivables	х	365
	period (days)	_	Net credit sales revenue	^	days
(v)	Rate of accounts receivable	=	Net credit sales revenue		
	turnover (times)		Average net accounts receivables		
(vi)	Accounts payable payment period	=	Average accounts payables	х	365
	(days)	_	Cost of sales	^	days
(vii)	Rate of accounts payable	=	Cost of sales		
	turnover (times)	_	Average accounts payables		
	Analysing for solvency and financing decisions				
(i)	Debt-equity ratio	=	Total liabilities		
		_	Total equity		
			For company, total equity is the shareholders' equity which comprises issued capital and reserves.		
(ii)	Interest coverage ratio		Net profit before interest expense		
		=	Interest expense		
(e)	Analysing for shareholders' rewards				
(i)	Earnings per ordinary share	=	Net profit – preference share dividends Average number of ordinary shares		
(ii)	Price earnings ratio of ordinary shares	=	Market price per ordinary share Earnings per ordinary share		
(iii)	Dividend yield	=	Dividend per ordinary share Market price per ordinary share	x	100

2 Others

(i)	Data of downsisting		Yearly depreciation		
	Rate of depreciation for straight-line method	=	Original cost – Scrap value or Residual value	Х	100
(ii)	Relative proportion of funding based on book value				
	Debt weighting	=	Long-term liabilities Total assets – Total current liabilities	- x	100
	Ordinary shares weighting	=	Issued share capital : ordinary shares + Retained earnings Total assets – Total current liabilities	_ x	100
	Preference shares weighting	=	Issued share capital : preference shares Total assets – Total current liabilities	- x	100

APPENDIX B

FORMATS OF FINANCIAL STATEMENTS

Generally accepted financial statement formats and terms other than those shown in this Appendix are also acceptable.

1 Ledger Account in columnar format

\sim .				
Cash	at.	hank	2000	ıınt

		Dr\$	Cr \$	\$
Mar 1	Balance b/d			5,100 Dr
5	Tung	2,340		7,440 Dr
8	Gordon		1,630	5,810 Dr
16	Sales	7,300		13,110 Dr
19	Inventory		4,110	9,000 Dr
22	Rental	700		9,700 Dr
26	Insurance		200	9,500 Dr
Apr 1	Balance b/d			9,500 Dr

2 Income Statement¹

a. Merchandising business

Name of Business

Income Statement for the year ended..

	\$	\$
Sales revenue	xxxx	
less: Sales returns	XXXX	
Net sales revenue		XXXX
less: Cost of sales		XXXX
Gross profit		xxxx
add: Other income		
Commission income	xxxx	
Discount received	xxxx	
^a Gain on sale of property, plant and equipment	xxxx	
Rent income	xxxx	
		xxxx
less: Expenses ^c		
Impairment loss on trade receivables	XXXX	
b Depreciation of fixtures and fittings	xxxx	
b Depreciation of office equipment	xxxx	
b Depreciation of motor vehicles	xxxx	
Interest	xxxx	
Insurance	xxxx	
^a Loss on sale of property, plant and equipment	xxxx	
Motor vehicle expenses	xxxx	
Office expenses	xxxx	
Rent and rates	xxxx	
Wages and salaries	xxxx	
		XXXX
Net profit		$\underline{\mathbf{x}\mathbf{x}\mathbf{x}\mathbf{x}}$

^a Either one of these items will appear if only one asset was sold during the year.

^b The depreciation amounts may be aggregated and presented as one figure.

 $^{^{\}rm c}$ It is not required to classify expenses by function.

^{*} The above statement does not show all income and expense items in this syllabus.

¹ This syllabus does not cover the Statement of Comprehensive Income.

b. Service business

Name of Business Income Statement for the year ended...

	\$	\$
Income		
Fees income	xxxx	
Commission income	xxxx	
Discount received	xxxx	
^a Gain on sale of non-current assets	xxxx	
Rent income	XXXX	
		XXXX
less: Expenses ^c		
Impairment loss on trade receivables	XXXX	
b Depreciation of fixtures and fittings	XXXX	
b Depreciation of office equipment	XXXX	
b Depreciation of motor vehicles	XXXX	
Interest	XXXX	
Insurance	XXXX	
^a Loss on sale of property, plant and equipment	XXXX	
Motor vehicle expenses	XXXX	
Office expenses	XXXX	
Rent and rates	XXXX	
Selling expenses	XXXX	
Wages and salaries	XXXX	
		XXXX
Net profit		<u>xxxx</u>

^a Either one of these items will appear if only one asset was sold during the year.

 $^{^{\}mbox{\scriptsize b}}$ $\,$ The depreciation amounts may be aggregated and presented as one figure.

 $^{^{\}rm c}$ $\,$ It is not required to classify expenses by function.

^{*} The above statement does not show all income and expense items in this syllabus.

c. Manufacturing business

Name of Business

Schedule of Cost of Goods Manufactured for the year ended.
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		Α
	\$	\$
Direct materials		
Beginning inventory of raw material	XXXX	
Purchases of raw material	XXXX	
Carriage on raw material	XXXX	
less: Ending inventory of raw material	XXXX	XXXX
Direct wages		xxxx
Manufacturing overheads		
Indirect wages	XXXX	
Factory rent and rates	XXXX	
Factory insurance	XXXX	
Factory general expenses	XXXX	
Depreciation of factory machinery	XXXX	<u>xxxx</u>
Total production cost		xxx
add: Beginning inventory of work in progress		XXXX
less: Ending inventory of work in progress		XXXX
Production cost of finished goods		<u>xxxx</u>

Name of Business

Extract of the Income Statement for the year ended...

	\$	\$
Sales revenue	XXXX	
less: Sales returns	XXXX	
Net sales revenue		XXXX
less: Cost of sales		
Beginning inventory of finished goods	XXXX	
Production cost of finished goods	XXXX	
less: Ending inventory of finished goods	XXXX	XXXX
Gross profit		XXXX

3 Statement of Changes in Equity

Name of Business Statement of Changes in Equity for the year ended...

	Share capital	Retained earnings	Asset Revaluation Reserve	Total
	\$	\$	\$	\$
Beginning balance	xxxx	xxxx	xxxx	xxxx
Changes in equity for the year				
Issue of share capital	xxxx			
Net profit		xxxx		
Dividends		(xxxx)		
Revaluation of assets			XXXX	
Ending balance	<u>xxxx</u>	<u>xxxx</u>	<u>xxxx</u>	<u>xxxx</u>

4 Balance Sheet

Name of Business Balance Sheet as at...

	\$	\$	\$	\$
Assets				
	Cost	Accumulated	Net book	
Non-current assets		Depreciation	value	
Property	XXXX	-	XXXX	
Fixtures and fittings	XXXX	XXXX	XXXX	
Equipment	XXXX	XXXX	XXX	
Motor vehicles	XXXX	XXXX	<u>xxxx</u>	
Total non-current assets	<u>xxxx</u>	XXXX		XXXX
<u>Current assets</u>				
Inventories			XXX	
Trade receivables		XXXX		
less: Allowance for impairment of	trade receivables	XXXX	XXXX	
Other receivables			XXXX	
Cash at bank			XXXX	
Cash in hand			<u>xxxx</u>	
Total current assets				XXXX
Total assets				XXXX
Equity and Liabilities				
Shareholders' equity				
Issued share capital				
xxx x% preference shares of \$x e	ach	XXXX		
xxx ordinary shares of \$x each		<u> </u>	XXXX	
Reserves				
Asset revaluation reserve		XXXX		
Retained earnings		<u>xxxx</u>	<u>xxxx</u>	
Total equity				XXXX
Non-current liabilities				
Long-term borrowings			<u> </u>	
Total non-current liabilities				XXXX
Current liabilities				
Trade payables			XXXX	
Other payables			XXXX	
Short-term borrowings			XXXX	
Current portion of long-term borro	owinas		XXXX	
Total current liabilities	go		<u>/////</u>	V
Total Current liabilities				XXXX
Total equity and liabilities				<u> </u>

^{*} The Singapore Companies Act has abolished par value shares and authorised share capital.

^{**} The above statement does not show all asset and liability items in this syllabus.

Statement of Cash Flows

	\$	\$
Cash flows from operating activities		
Net profit for the year before interest	xxxx	
Adjustments for		
Depreciation	XXXX	
(Gain)/loss on sale of property, plant and equipment	XXXX	
Operating cash flows before movements in working capital		XXXX
(Increase)/decrease in inventories	xxxx	
(Increase)/decrease in trade receivables	XXXX	
(Increase)/decrease in other receivables	xxxx	
Increase/(decrease) in trade payables	xxxx	
Increase/(decrease) in other payables	XXXX	
Cash generated from/used in operations		XXXX
Interest paid		XXXX
Net cash provided by/(used in) operating activities		xxxx
Cash flows from investing activities		
Purchase of non-current assets	(xxxx)	
Purchase investments	(xxxx)	
Interest paid	(xxxx)	
Proceed from sale of non-current assets	XXXX	
Dividend received	XXXX	
Interest received	XXXX	
Net cash provided by/(used in) investing activities		xxxx
Cash flows from financing activities		
Proceeds from issuance of share issues	xxxx	
Proceeds from borrowings	XXXX	
Repayment of borrowings	(xxxx)	
Dividend paid	XXXX	
Net cash provided by/(used in) financing activities		XXXX
Net increase/(decrease) in cash and cash equivalents		<u>xxxx</u>
Cash and bank balance at beginning of year		xxxx
Net increase/(decrease) in cash and cash equivalents		XXXX
Cash and bank balance at end of year		XXXX

^{*} The above statement does not show all the adjustment items.