

## **Paper 4 – Information Technology Applications in Accounting**

### **Aim**

The aim of this paper is two-fold. The first is to assess students' knowledge and skills in the hands-on practice of computerised accounting work. The second is to assess the application of computer-based technologies for processing, presenting and managing accounting data as well as documents.

### **Content**

#### **1. Selection and implementation of computerised accounting systems and software**

<b>Competence Required</b>	<b>Activity to Develop and Demonstrate Competence</b>	<b>Indicative Level</b>
Understanding of the selection and implementation of computerised accounting systems and software	<ul style="list-style-type: none"><li>• Understand organisational context of systems development, system analysis, conventional wisdom on systems development lifecycle, development of prototype, and feasibility study</li></ul>	1
	<ul style="list-style-type: none"><li>• Understand systems design, implementation and operation</li></ul>	1
	<ul style="list-style-type: none"><li>• Outline the accounting information system development strategies: the selection of packaged software, customised software, and/or modified software</li></ul>	2
	<ul style="list-style-type: none"><li>• Understand the role of accounting information system in e-business</li></ul>	2
	<ul style="list-style-type: none"><li>• Understand the needs, benefits and risks of outsourcing computerised accounting work</li></ul>	1

#### **2. Human information processing of computerised accounting systems**

<b>Competence Required</b>	<b>Activity to Develop and Demonstrate Competence</b>	<b>Indicative Level</b>
Understanding of the human information processing mechanism in handling computerised accounting work	<ul style="list-style-type: none"><li>• Describe the factors of human computer interaction: ergonomics, interaction styles, and the context of interaction</li></ul>	1
	<ul style="list-style-type: none"><li>• Describe the uses of task analysis in handling computerised accounting routines: participation in requirements capture, system design and interface design</li></ul>	1
	<ul style="list-style-type: none"><li>• Understand the uses of the help function and documentation of a computerised accounting system</li></ul>	1

### 3. System for financial recording

Competence Required	Activity to Develop and Demonstrate Competence	Indicative Level
Skill in the application of a computerised financial accounting system for financial reporting	<ul style="list-style-type: none"> <li>• Demonstrate and apply skill in the operation of the financial book-keeping system:</li> </ul>	
	<ul style="list-style-type: none"> <li>- create specific types of accounts under the given structure of chart of accounts</li> </ul>	2
	<ul style="list-style-type: none"> <li>- conduct ledger transactions in the general ledger, receivables ledger and payable ledger. Details include master file creation, end of period adjustments and closing</li> </ul>	3
	<ul style="list-style-type: none"> <li>- create a customer file: handle billing transactions for invoices, fill backorders and sales returns processing</li> </ul>	3
	<ul style="list-style-type: none"> <li>- create a vendor file: conduct transactions for purchase orders, merchandise received and purchase returns processing</li> </ul>	3
	<ul style="list-style-type: none"> <li>- handle cash transactions for receipt and payment processing</li> </ul>	3
	<ul style="list-style-type: none"> <li>- produce financial reports covering chart of accounts, aging report, trial balance, profit and loss statement, balance sheet</li> </ul>	3
	<ul style="list-style-type: none"> <li>- perform periodic adjustments during month-end and year-end, including entries for accruals, prepayment and depreciation</li> </ul>	2

#### 4. System for accounting operations, control and decision-making

Competence Required	Activity to Develop and Demonstrate Competence	Indicative Level
Skill in the application of spreadsheet software for financial document preparation and costing analysis	<ul style="list-style-type: none"> <li>• Demonstrate ability and skill in spreadsheet applications with Excel using referenced cells, logical functions, statistical functions, financial functions, and graphs to:               <ul style="list-style-type: none"> <li>- perform financial result analysis in actual, static budgeted and flexible budgeted formats</li> <li>- conduct financial statement analysis</li> <li>- conduct profit volume analysis and pricing decision in variable costing format</li> <li>- perform discounted cash flow analysis for financial management</li> <li>- forecast inventory levels with moving average analysis for stock control</li> <li>- compile operation and sales data</li> </ul> </li> <li>• Generate a PivotTable report in variable costing format for accounting decision-making</li> </ul>	<p style="text-align: center;">3</p> <p style="text-align: center;">3</p> <p style="text-align: center;">3</p> <p style="text-align: center;">2</p> <p style="text-align: center;">2</p> <p style="text-align: center;">2</p> <p style="text-align: center;">3</p>

#### 5. Control and security

Competence Required	Activity to Develop and Demonstrate Competence	Indicative Level
Understanding of the concepts of computerised accounting data control and security	<ul style="list-style-type: none"> <li>• Understand data security, nature and sources of threats to computer systems</li> <li>• Outline the types of security design, contingency planning and operation</li> <li>• Understand the types of computer crime</li> <li>• Understand the computer-based information systems control</li> <li>• Describe systems back-up procedures for disaster recovery</li> </ul>	<p style="text-align: center;">2</p> <p style="text-align: center;">2</p> <p style="text-align: center;">2</p> <p style="text-align: center;">2</p> <p style="text-align: center;">2</p>

**Examination format:**

<b>Section A</b>	10 – 25 multiple choice questions	25 marks
<b>Section B</b>	2 questions on hands-on computerised accounting routines <ul style="list-style-type: none"> <li>• System for financial recording</li> <li>• System for accounting operations, control and decision-making</li> </ul>	75 marks
		----- 100 marks =====

The examination time is 3½ hours, which includes the time needed for basic data input and report printing. Students will use DacEasy Accounting for Windows and Microsoft Excel to answer two questions in the examination papers; in addition DacEasy will be used to answer the “System for financial recording” question.

**Essential reading:**

<u>Author</u>	<u>Title</u>	<u>Publisher</u>
Lee, S. S. P. and Li, G. K.H.	Information Technology Applications in Accounting (2004 Edition)	HKIAAT (formerly HKAAT)
Smith, G. N.	Excel Applications for Accounting Principles (2 <sup>nd</sup> Edition)	South-Western
Fulford, James	The Accountant’s Guide to Advanced Excel	Oak Tree Press
Romney, M. B. and Steinbart, P. J.	Accounting Information Systems (10 <sup>th</sup> Edition)	Prentice Hall
Dix, A., Finlay, J., Arowd, G. and Beale, R.	Human – Computer Interaction (3 <sup>rd</sup> Edition)	Pearson Education Ltd

**Additional reading:**

<u>Author</u>	<u>Title</u>	<u>Publisher</u>
Klooster, Dale H. and Allen, Warren W.	Integrated Accounting for Windows (5 <sup>th</sup> Edition)	South-Western
Smith, G. N.	Excel Spreadsheet Applications Series for Cost Accounting (2 <sup>nd</sup> Edition)	South-Western