## EXAMINATION INFORMATION GUIDE MANAGEMENT INFORMATION

## Structure of examination paper

The syllabus will be assessed in a 3 hours paper plus a 15 minutes reading time.

The questions will be in two sections as follows:

#### Section A:

Section A will be a 20 compulsory multiple - choice questions of one mark each.

Twelve of the questions will be taken from the cost accounting section of the syllabus, while the rest questions will be from the information technology section of the syllabus.

#### **Section B**

Section B will be 6 questions of 20 marks each out of which candidates are expected to attempt 4 questions. 60% of the questions will be taken from the costing section of the syllabus while the rest 40% will be from the information technology section of the syllabus.

## **Detailed contents of the syllabus**

## A. Cost accounting

30%

- 1 Introduction to cost accounting
- (a) Describe the purpose and role of cost accounting within an organisation considering the following:
  - (i) Definition of cost accounting;
  - (ii) Purpose of cost accounting;
  - (iii) Role of cost accountants; and
  - (iv) Advantages and disadvantages of cost accounting.
- (b) Differentiate between cost accounting and financial accounting.
- (c) Outline the managerial processes of planning, decision making and control.
- (d) Explain the concepts of strategic, tactical and operational planning.
- (e) Differentiate between cost data and information.
- (f) Explain the attributes of good information.
- 2 Cost classifications, codification, segregation and estimation
  - (a) Cost classifications
    - (i) Explain the meaning of cost classification.

- (ii) Explain the different classifications of cost.
- (iii) Describe different types of cost behaviour using graphical illustrations.
- (b) Cost codification
  - (i) Define cost codification.
  - (ii) Explain the principles of a coding system.
  - (iii) Explain and illustrate the use of codes in categorising transactions.
- (c) Cost segregation and estimation
  - (i) Explain the meaning of cost segregation and cost estimation.
  - (ii) Explain the structure of linear functions and equations.
  - (iii) Demonstrate the use of the following cost segregation techniques:
    - Industrial engineering;
    - Account analysis;
    - Scatter graph;
    - High/low analysis; and
    - Regression analyses.
  - (iv) Calculate and explain simple correlation coefficient.
- 3 Accounting for cost elements
- 4 (a) Accounting for inventory (i) Describe the different procedures and documents necessary for material management:
  - Ordering;
  - Purchasing;
  - Receiving;
  - Storage; and
  - Issuing.
  - (ii) Explain inventory management and control procedures.
  - (iii) Identify, explain and calculate relevant inventory costs.
  - (iv) Compute optimal re-order quantities (involving quantity discounts).
  - (v) Explain and calculate the value of closing inventory and material issues to production using LIFO, FIFO and average methods.
  - (vi) Explain Just-In-Time (JIT).
  - (b) Accounting for labour
  - (i) Explain labour recording and monitoring procedures.
  - (ii) Determine direct and indirect costs of labour.
  - (iii) Describe different remuneration methods: time-based systems, piecework systems, and individual and group incentive schemes.
    - (iv) Determine the level and ascertain the causes and costs of labour turnover.
    - (v) Prepare and explain the entries in payroll accounting.

- (c) Accounting for overheads
- (i) Explain the components of overheads.
- (ii) Distinguish amongst allocation, apportionment and absorption of overheads.
- (iii) Describe the bases of overheads apportionment.
- (iv) Apportion and re-apportion overhead costs between production and service centres (including using the reciprocal method where service cost centres work for each other and simultaneous equation method).
- (v) Describe the bases and procedures involved in determining production overhead absorption rates.
- (vi) Explain and calculate under- and over-absorption of overheads.
- (vii) Explain activity-based costing.

## 4 Costing methods

- (a.) Explain types of costing methods and compile cost using:
  - (i) Specific order costing of:
    - Job costing;
    - Batch costing; and
    - Contract costing.

#### (ii) Process costing

- Determine the cost of a unit of output where there is normal loss, abnormal loss and abnormal gain.
- Prepare process accounts (including accounting for normal loss, abnormal loss and abnormal gain).
- Explain the concept of equivalent units.
- ❖ Determine the value of complete units and work-in-progress (WIP) using weighted average and FIFO methods.
- ❖ Differentiate between by-products and joint products.
- Estimate the value of by-products and joint products at split-off point (the point of separation).

#### (iii) Service costing

- ❖ Identify situations where the use of service/operation costing is appropriate.
- ❖ Illustrate suitable unit cost measures that may be used in different service/operation situations.

Carry out service cost analysis in simple service industry situations.

## 5. Costing techniques

- (a) Explain the various types of costing techniques.
- (b) Prepare an income statement and determine the profit or loss under absorption and marginal costing.
- (c) Describe the advantages and disadvantages of absorption and marginal costing.
- (d) Reconcile the profits or losses computed under absorption and marginal costing.

#### B. Forecasting, budgeting and decision making

30%

- 1. Forecasting techniques
  - (a) Explain the principles of time series analysis (cyclical, trend, seasonal variation and random elements).
  - (b) Explain the advantages and disadvantages of time series analysis.
  - (c) Calculate moving averages; use trend and seasonal variation (additive and multiplicative) to make budget forecasts.

## 2. Budgeting

- (a) Explain the importance of budgeting system.
- (b) Describe the stages in the budgeting process.
- (c.) Explain the importance of principal budget factor.
- (d) Prepare simple functional budgets.
- (e) Prepare simple cash budget.
- (f) Prepare simple master budget.

## 3. Basic variance analysis

(a) The purpose and principles of standard costing

Identify types of standard and calculate the following basic variances:

- i. Direct material price and usage;
- ii. Direct labour rate and efficiency;
- iii. Variable production overhead expenditure and efficiency;
- iv. Fixed production overhead expenditure and volume; and
- v. Sales price and volume.
- (b) Explain possible causes of the variances.
- 4. Cost-Volume-Profit (CVP) analysis

- (a) Explain the concept of cost-volume-profit analysis.
- (b) Calculate break-even point, margin of safety and target profit for a single product.
  - (c) Prepare and explain break-even chart (traditional approach, contribution approach, profit/volume approach).
- (d) Explain the limitations of cost-volume-profit analysis.

#### 5. Decision-making

- (a) Explain the concept of relevant cost and revenue.
- (b) Explain the concept of limiting factor.
- (c) Describe short-term decision-making situations involving make or buy decisions using relevant cost approach.
- (d) Explain and calculate optimal resource allocation to a product or service based on the concept of limiting factor (single constraint/bottleneck).

## C. Information systems and technology

40%

- 1. Information systems
  - (a) Define and explain information systems.
  - (b) State the approaches to information systems.
  - (c) Explain the usefulness of information systems to the following business functions.
    - (i) Sales and marketing
    - (ii) Manufacturing and production;
    - (iii) Finance and accounting; and
    - (iv) Human resources.
  - (d) Describe the relationship among organisations, information systems and business processes.
  - (e) State and explain the following classifications of information systems:
    - (i) Executive support systems (ESS);
    - (ii) Management information systems (MIS);
    - (iii) Decision support systems (DSS);
    - (iv) Knowledge management systems (KMS);
    - (v) Transaction processing systems (TPS); and
    - (vi) Office information systems (OIS).
  - (f) Explain the ethical, social, and political issues of information systems.
  - (g) Explain the impact of contemporary information systems and the Internet on the protection of individual privacy and intellectual property.
  - (h) State management challenges in developing and using information systems in organisations.

#### 2. Electronic business and e-commerce

- (a) Explain the modern information technology infrastructure for a digital firm.
- (b) Identify internet platforms and the use of e-business and e-commerce.
- (c) Describe the technologies used for e-business and e-business models.
- (d) Explain the internal and external applications of e-business and e-commerce.
- (e) Itemise management issues associated with e-business.
- (f) Explain the effect of internet technology on value propositions, business models, consumer retailing and business-to-business transactions.
- (g) Explain e-commerce payment systems.
- (h) State the role of internet technology in facilitating management and coordination of internal and inter-organisational business processes.
- (i) Explain the challenges posed by e-business and e-commerce in transactions.
- (j) Explain m-commerce and its applications in business.

## 3. Information technology

- a. Computer hardware
  - (i) Identify and discuss different types of computer hardware.
  - (ii) Identify and discuss computer processor, storage, input and output devices.
- b. Computer software
  - (i) Explain the following:
    - System software;
    - Application software packages;
    - Process of managing computer software; and
    - Collaborative and social software.
  - (ii) State the methods and processes of acquiring application software packages.

#### c. Database and information storage

- (i) Define and explain a database.
- (ii) Explain the approaches to filing in an organization.
- (iii) Explain the procedure for database purchase; design principles, warehousing and maintenance issues.
- (iv) Explain the database management systems (DBMS) approach.
- (v) Explain modern media in storing data and information.

- (vi) Outline the process of managing data resources.
- d. Cloud computing
  - (i) Explain the infrastructure, platform and application (software service) layers of the cloud pyramid.
  - (ii) Explain the characteristics of cloud computing.
  - (iii) Differentiate between private and public clouds. (iv) Differentiate between on-line and real-time processing.
- e. Processing techniques
  - (i) Explain and distinguish amongst multitasking, multi-processing and multi-programming.
  - (ii) Explain centralized, decentralized and distributed processing and state their advantages and disadvantages.

#### 4. Organisational support systems

a. Enterprise applications

Describe the following applications that support business functions:

- Enterprise resource planning (ERP);
- ii. Supply chain management (SCM);
- iii. Customer relationship management (CRM) systems;
- iv. Warehouse management system (WMS); and
- v. Enterprise content system (ECS).
- b. Computer forensic

Define and explain computer forensic practices and applications.

# 5. The role of accountants in information system development Explain the following:

- (a) The system development life cycle (SDLC);
- (b) Alternatives to SDLC including prototyping and rapid application development;
- (c) System development and management considerations;
- (d) The impact of developing new systems on organisations;
- (e) Developing information systems that support an organisation's business plan;
- (f) The core activities in the systems development process;
- (g) Alternative methods for developing information systems and alternative methodologies for modelling systems; and
- (h) The challenges of developing information systems.

## 6. System security and control

- (a) Explain the purpose for special protection from destruction, error, and abuse of information systems.
- (b) Explain the business value of security and control.
- (c) Explain the organisational and managerial frameworks for security and control.
- (d) Identify various system vulnerabilities and abuses.
- (e) State the preventive maintenance techniques and security controls.
- (f) Explain disaster recovery planning.
- (g) Explain quality control and quality assurance.
- (h) Outline the tools and technologies for safeguarding information resources.
- (i) Identify the challenges posed by information systems security and control, and management solutions.