



**UNIVERSITI KUALA LUMPUR
BUSINESS SCHOOL**

**FINAL EXAMINATION
MARCH 2026 SEMESTER**

COURSE CODE : EAB20804
COURSE NAME : ACCOUNTING INFORMATION SYSTEM
PROGRAMME NAME : BACHELOR IN ACCOUNTING (HONS)
DATE : 20 JUNE 2026
TIME : 2:00PM - 5:00PM
DURATION : 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Please **CAREFULLY** read the instructions given in the question paper.
2. This question paper has information printed on both sides of the paper.
3. This question paper consists of **FOUR (4)** questions.
4. Answer **ALL** questions.
5. Please write your answers on the answer booklet provided.
6. All questions must be answered in **English** (any other language is not allowed).
7. This question paper must not be removed from the examination hall.

THERE ARE SEVEN (7) PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

(Total: 100 marks)

INSTRUCTION: Answer ALL questions.

Please use the answer booklet provided

Question 1

Diamond Manufacturing Company is a manufacturer of stereo equipment with six sales offices nationwide and one manufacturing plant in Japan. Currently, employment is at approximately 200 employees. Diamond Manufacturing Company focuses on the production of high-quality stereo equipment for resale by retailers. Its larger competitors include Sony, Aiwa and Panasonic.

Payroll System

The payrolls of all six sales offices and the manufacturing plant are processed centrally from the main office. On Thursday, every two weeks, employees enter their hour-worked data from their personally maintained timecards into computer terminals located in each sales office and work area. The computer system validates the employee by checking his or her identification number against the employee history file, which is in the main plant IT department. This task must be completed by noon on the designated day. At the end of the validation process, the work area (sales office or manufacturing) supervisor prints a personnel action form from the validation terminal without reviewing it, straightaway forwards it, along with the employee time cards, to the payroll in the main office payroll department.

Upon receipt of the timecards and personnel action forms, the payroll clerk manually updates the employee records and then prepares the payroll register. A copy of the payroll register, along with the timecards, and the personnel action form are filed in the payroll department. A second copy of the payroll register is sent to general ledger clerk, who posts to the general cash account and wages expenses for the full amount of the payroll. Next, the payroll clerk prepares the pay cheques and sends them to the cash disbursement department. The cash disbursement clerk, who then distributes the cheques to the employees, signs these.

Fixed Assets System

Asset acquisition begins when the user department manager recognizes the need to obtain new or replace an existing fixed asset. User can request for the fixed asset from the management either verbally or by written request depending on them. The manager manually prepares two copies of a purchase requisition; one is filed temporarily in the department, and one is sent to the purchasing department. From the purchase requisition, the purchasing department clerk manually prepares three

copies of purchase orders. One copy is sent to the supplier, another copy is sent to the accounts payable department, and the third copy is filed in the purchasing department. When the assets arrive, the user department receives it along with the packing slip. The packing slip and goods are reconciled with the purchase requisition on file, and then the packing slip and requisition are filed permanently in the user department. However, no receiving report is prepared upon receiving of the particular asset.

The accounts payables clerk receives the purchase order from the purchasing department and files it temporarily. Upon receipt of the invoice from the vendor, the accounts payables clerk reconciles it with purchase order on file. Using the department computer, the accounts payables clerk then sets up account payables and records the asset in the fixed assets inventory ledger. The clerk then prints the cash disbursement voucher and sends it to the cash disbursement department. At the end of the day, the clerk prints account summaries from account payable and fixed asset inventory, which she sends to the general ledger department. The purchase order and invoice are permanently filed in the department. The cash disbursement clerk receives the cash disbursement voucher from account payable and manually prepares a cheque, which he sends to the vendor.

The clerk then manually records the cheques in the cheque register. At the end of the day, the clerk sends a hard-copy journal voucher to the general ledger department. When an asset has reached the end of its useful life, the user department manager prepares a disposal report and sends it to the account payable clerk, who adjusts fixed asset inventory records. No approval is required upon disposal of fixed asset item in the organization. The general ledger department clerk reconciles the journal voucher, the accounts payable summary, and the inventory summary that it has received from accounts payables and cash disbursement. These figures are then posted to the general ledger and the account summaries and journal vouchers are file in the documents.

Required:

- (a) Describe **FOUR (4)** internal control weaknesses in the system above. (8 marks)
- (b) Based on your answer in (a), provide **FOUR (4)** specific recommendations for improving control stated above. Please use the following format to answer question (a) and (b).

(a) Internal Control Weaknesses	(b) Recommendations
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(8 marks)

- (c) A company produces goods based on customer orders and avoids excess inventory. Identify the most suitable planning method and justify your answer.

(4 marks)

[20 marks]

Question 2**The System Development Life Cycle (SDLC) of an Integrated Healthcare Information System**

In today's digital era, healthcare organisations rely heavily on integrated information systems to manage clinical, administrative, and financial data efficiently. Ineffective systems can lead to delays, inaccurate records, billing errors, and poor patient care. Therefore, implementing a reliable system is essential for improving efficiency, ensuring compliance, and supporting decision-making.

MediCare Plus Hospital, a growing private healthcare provider, faced challenges due to fragmented systems across departments such as registration, pharmacy, laboratory, and billing. This resulted in duplicated data, inconsistent medical records, frequent billing errors, and difficulty in accessing accurate information. To address these issues, management initiated the development of an Integrated Healthcare Information System using the System Development Life Cycle (SDLC).

During the planning phase, the hospital identified system weaknesses and set objectives such as improving data accuracy, integration, reporting, and security. A feasibility study confirmed the project's long-term benefits despite high initial costs. In the analysis phase, requirements were gathered through interviews and observations, revealing issues like repeated data entry, manual processes, and lack of real-time information.

In the design phase, a centralised database and user-friendly interfaces were developed, along with integrated modules for medical records, billing, pharmacy, and reporting. Strong security features were also included. The implementation phase involved system development, testing, staff training, and gradual deployment, although challenges such as staff resistance and data migration were encountered.

Finally, in the maintenance phase, the system was continuously updated and improved with enhancements like cloud storage and data analytics. Overall, the new system improved data accuracy, reduced errors, enhanced decision-making, and strengthened coordination across departments. The case highlights the importance of each SDLC phase and the need for continuous training and effective change management for successful system implementation.

Additionally, the success of the system depended not only on advanced technology but also on effective collaboration between management, IT specialists, and end users. Continuous user training, clear communication, and strong support systems were essential in ensuring smooth adoption and long-term sustainability of the system within the hospital.

Required:

- (a) Explain **FIVE (5)** major phases of the System Development Life Cycle (SDLC) that contributed to the successful development and implementation of an Integrated Healthcare Information System.
(10 marks)
- (b) Evaluate the importance of **THREE (3)** types of computer-based information systems used in organisations in supporting hospital operations.
(6 marks)
- (c) Analyse **THREE (3)** major challenges faced by the project team during the development and implementation of the new system.
(6 marks)
- (d) Compare **TWO (2)** key differences between Structured and Agile system development methodologies.
(4 marks)
[26 marks]

Question 3

- (a) The business and technology environment are constantly evolving, requiring information systems to adapt rapidly to changing needs and innovations. Describe how this dynamic environment influences the practice of Systems Analysis and Design (SAD).

(6 marks)

- (b) Beta Corporation, a multinational company specialising in the manufacturing and distribution of nanochip semiconductors, is planning to implement a new blockchain-enabled accounting system. The system aims to enhance transparency, security, efficiency, auditability, and fraud prevention in financial reporting.

Management is considering two alternative development approaches:

- Option 1: Outsourcing the system development to a third-party vendor
- Option 2: Developing the system in-house using internal resources

To support decision-making, Beta Corporation decides to analyse the project timeline using a Program Evaluation and Review Technique (PERT) chart. The major activities involved in the system development project and their estimated durations (in weeks) are shown below:

Task	Description	Predecessor	Weeks
A	Feasibility study and project approval	-	2
B	System requirements analysis	A	3
C	Blockchain architecture design	B	4
D	Vendor selection (outsourcing) / Staff training (in-house)	B	3
E	System development and coding	C, D	6
F	System testing and debugging	E	4
G	User training and system implementation	F	2

Required:

- i. Draw a PERT chart for the blockchain-enabled accounting system development project based on the information provided.

(14 marks)

- ii. Identify the critical path of the project and calculate the minimum project completion time.

(4 marks)

[24 marks]

Question 4

EcoFresh Market Sdn. Bhd. is a rapidly growing retail company that owns and operates a chain of organic grocery stores across multiple states in Malaysia. The company specializes in selling organic vegetables, fresh produce, eco-friendly household products, and ready-to-eat healthy meals. Over the past five years, EcoFresh has built a strong reputation for providing high-quality, sustainable products to health-conscious consumers. Due to increasing demand and changing customer preferences, EcoFresh plans to expand its operations by opening new outlets in major cities nationwide. In addition, the company intends to launch a fully integrated e-commerce platform to allow customers to shop online, place orders for home delivery, and subscribe to weekly fresh produce boxes.

The Managing Director, Aryana, has hired you as a systems consultant to design and develop a web-based integrated information system that will connect all retail outlets, suppliers, warehouses, and the headquarters. The proposed system must support both physical store operations and online business activities while ensuring accurate, timely, and secure information flow. Currently, each EcoFresh outlet operates independently using SQL Accounting software to manage sales transactions, accounts payable, and general ledger functions. Inventory is tracked manually using spreadsheets, and discrepancies between actual stock and recorded stock levels frequently occur.

Customer information is partially stored in a separate application used for the loyalty programme, but this system is not integrated with sales or inventory systems. During the requirements analysis phase, you conducted interviews with store managers, cashiers, warehouse personnel, suppliers, and selected customers. You also observed daily operations at several outlets, reviewed transaction records, analysed the current accounting system, and examined inventory and sales reports.

The following key findings were obtained:

- Each store serves approximately 200 to 400 customers daily, with higher traffic during weekends and promotional periods. Customers can purchase items in-store or through an online platform.
- EcoFresh offers a customer loyalty programme, where members earn points for every purchase. However, points are not updated in real time, and customers often complain about inaccuracies.
- Sales transactions are recorded at checkout counters, but inventory levels are not automatically updated, leading to overstocking or stock shortages.
- EcoFresh has a limited shelf life, and the company currently lacks a proper system to monitor expiry dates and minimize wastage.

- Suppliers deliver goods directly to individual stores, and purchase orders are prepared manually, resulting in delays and occasional ordering errors.
- There is no centralized database to track supplier performance, delivery schedules, or pricing history.
- At the end of each day, store managers generate sales reports and email them to headquarters. Inventory reports are prepared weekly using spreadsheets, which often contain inconsistencies.
- The headquarters prepares monthly financial statements, sales analysis reports, and inventory summaries, but the process is time-consuming due to fragmented data sources.
- The current system does not capture detailed customer purchase history, making it difficult to analyse buying behaviour, forecast demand, or implement targeted marketing strategies.
- Managers expressed the need for real-time dashboards, automated inventory replenishment, demand forecasting, and detailed profitability analysis by product category.
- Staff suggested the use of barcode scanners, mobile devices, and digital payment integration to improve efficiency and reduce manual work.
- The company is also concerned about data security, system reliability, and scalability, especially with the planned nationwide expansion and online operations.

Required:

- (a) Based on the scenario above, construct **FOUR (4)** system requirements for each of the following categories.

- i. Input
- ii. Process
- iii. Output
- iv. Performance
- v. Controls

(20 marks)

- (b) Explain the methods below to gather information for analysis:

- i. Interviews
- ii. Questionnaire
- iii. Observation
- iv. Document review

(10 marks)

[30 marks]

END OF QUESTION PAPER