

**FINAL EXAMINATION****BACHELOR OF ACCOUNTANCY (HONOURS)**

COURSE	: ACCOUNTING SYSTEM ANALYSIS AND DESIGN
COURSE CODE	: AIS3053
DURATION	: 3 HOURS

INSTRUCTIONS TO CANDIDATES:

1. This question paper consists of **FIVE (5)** questions.
2. Answer **ALL** questions in the Answer Booklet provided.
3. Please check to make sure that this examination pack consists of:
 - i. The Question Paper
 - ii. An Answer Booklet
4. Do not bring any material into the examination hall.
5. Please write your answer using permanent ink.

MYKAD/PASSPORT NO : _____

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This question paper consists of 8 printed pages including the front page

QUESTION 1

- a. Research has shown that many information systems projects are delayed, exceed their budgets, or fail to achieve their intended objectives due to ineffective project management. To ensure the successful implementation of the new Accounting Information System (AIS), the project manager must perform several important roles throughout the system development process.

Schmidt, J. (2023). Mitigating risk of failure in information technology projects. Journal of Responsible Technology, 15, 100067.

Required:

Describe **FIVE (5)** roles of a project manager in an information systems development team to ensure successful project management.

(10 marks)

- b. FreshCool Logistics Sdn. Bhd. recently implemented a new barcode-based warehouse management system in its cold storage facility. To update inventory records and prepare monthly reports on time, the eight warehouse employees are required to scan all inventory items within a 48-hour period while continuing their normal duties. During peak festive seasons, when inventory levels increase significantly, the scanning process takes up to 40 hours to complete. In addition, the barcode scanners are unable to accurately record some frozen products stored in extremely low-temperature environments. A recent audit revealed several discrepancies between the physical inventory and the inventory records.

Required:

Justify the feasibility aspect(s) not adequately considered by FreshCool Logistics Sdn. Bhd. before implementing the warehouse management system.

(10 marks)

(Total: 20 marks)

QUESTION 2

- a. Businesses often modify or replace their financial information system to keep pace with their growth and take advantage of improved Information Technology (IT). This requires a substantial time and resource commitment. When an organization changes its Accounting Information System (AIS), a systems analysis takes place. Systems analysis is often performed by a project team composed of a systems analyst, a management accountant, and other knowledgeable and helpful people.

Required:

Determine **FIVE (5)** roles of a management accountant during the systems analysis phase of the Accounting Information System (AIS) development project.

(10 marks)

- b. MegaMart Trading Sdn. Bhd. is developing a new Sales and Customer Management Information System to improve its business operations. As a systems analyst, you need to gather information from different stakeholders before designing the system.
- i. Obtaining feedback from 300 employees regarding a proposed employee incentive scheme to replace the current bonus program.
 - ii. Determining how the credit approval process for new customers should be carried out and identifying the employees responsible for approving customer credit applications.

Required:

For each of the following situations, justify which data gathering method would be most appropriate.

(10 marks)

(Total: 20 marks)

QUESTION 3

BuildPro Hardware Sdn. Bhd. employs over 150 staff across its sales, warehouse, and administrative departments. The payroll process of the company is as follows:

Employees record their attendance using a biometric time attendance system. At the end of each week, the Human Resource (HR) clerk reviews the attendance records and prepares a time summary report showing the hours worked by each employee. The report is then forwarded to the payroll clerk.

The payroll clerk uses the time summary report and employee master file to calculate gross pay, overtime pay, statutory deductions, and net pay for each employee. A payroll register is prepared and submitted to the payroll supervisor for verification and approval.

After approval, the payroll clerk prepares an electronic funds transfer (EFT) file and forwards it to the treasurer. The treasurer reviews the payroll details and authorizes the transfer of salaries to employees' bank accounts. Upon completion of the transfer, the bank sends a payment confirmation to the treasurer.

The payroll clerk updates the payroll records and files the payroll register, time summary report, and payment confirmation documents. At the end of each month, the payroll clerk generates a payroll summary report and submits it to the Finance Manager for review.

Required:

- a. Illustrate the intermediate Data Flow Diagram (DFD) that represents the payroll process at BuildPro Hardware Sdn. Bhd.
(10 marks)
- b. Determine **FIVE (5)** internal control weaknesses in the payroll process and recommend an appropriate control procedure for each weakness identified.
(10 marks)

(Total: 20 marks)

QUESTION 4

- a. Global AM Sdn. Bhd. is a rapidly growing wholesale distributor of household and consumer products throughout Malaysia. The company plans to implement a new integrated Accounting Information System (AIS) to improve its inventory management, sales processing, purchasing activities, and financial reporting functions.

Due to limited in-house Information Technology (IT) expertise and the need to complete the project within a tight implementation schedule, management has decided to outsource the system development project to an external software vendor. Before selecting a vendor, the company must carefully evaluate several factors to ensure the success of the outsourcing arrangement.

Required:

Evaluate **FIVE (5)** benefits of outsourcing the development of the new Accounting Information System (AIS) for Global AM Sdn. Bhd.

(10 marks)

- b. Tiny Toddlers, a manufacturer of children's toys and furniture, is designing and implementing a distributed system to assist its sales force. Each of the 10 sales offices in Europe and 20 sales offices in the Malaysia maintains its own customers and is responsible for granting credit and collecting receivables. The electronic data input form used by each sales office to maintain the customer master file is shown in Figure 1 below.

CUSTOMER MAINTENANCE FORM	
New Customer?	☐ Yes ☒ No 10245
Name	Seri Maju Furniture Sdn. Bhd.
New Address	No. 12, Jalan Industri 3/2, Taman Perindustrian Subang, 47610 Subang Jaya, Selangor Darul Ehsan.
Old Address	No. 8, Jalan Teratai 2, Taman Mewah, 47301 Petaling Jaya, Selangor Darul Ehsan.
Salesperson #	05
Requested Credit Limit	RM 80,000
Sales Office	Central Malaysia
Pricing Code	30
Estimated Sales	RM 450,000
Credit Limit	RM 20,000
Currency	Malaysia ☒
Other	☐
Bank	Maybank Berhad Menara Maybank, No. 100, Jalan Tun Perak, 50050 Kuala Lumpur.
Bank Line	
Rating	Satisfactory
Sales Manager	
Credit Manager	

Figure 1

Required:

Evaluate the electronic data input form shown in **Figure 1** using the following format:

Weakness	Explanation	Recommendation(s)
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(10 marks)

(Total: 20 marks)

QUESTION 5

- a. RR Legal Services recently developed a new Payroll Information System to improve the efficiency and accuracy of payroll processing. During final testing, just before the system was scheduled to go live, several serious problems were discovered. The system generated payroll checks with negative amounts, printed checks with incorrect employee names and employee numbers, and produced unrealistic payroll amounts when data entry errors occurred. In some cases, employees received payroll amounts that exceeded their annual salaries.

Although the system was implemented on schedule, approximately 1.5% of payroll transactions required manual correction during each payroll cycle. Further investigation revealed that the new payroll system had not been tested for compatibility with the existing payroll database. In addition, there was no formal transition plan between system development and implementation, and the system was never operated in parallel with the existing payroll system before deployment.

Required:

Explain **FIVE (5)** testing activities that the company should have performed to ensure the successful implementation of the new Payroll Information System.
(10 marks)

- b. Home Sdn. Bhd., a wholesaler of household and consumer products, recently implemented a new Customer Call Tracking System to improve customer service and monitor customer inquiries. However, several issues were reported after the system went live.

Employees complained that the system took approximately 20 minutes to load on their computers and frequently crashed during daily operations. In addition, the project lacked a clear reporting structure during development, and responsibility for managing the project was unclear. The lead project manager resigned halfway through the project, while several in-house programmers were reassigned to other projects. As a result, the systems analyst received limited supervision from management.

To address these problems, management hired an external software consulting firm. However, after spending RM200,000 on corrective work over a three-month period, many of the system issues remained unresolved. The company had not verified the consulting firm's references before awarding the contract. Furthermore, the consultants made numerous programming errors, communication between the consultants and company personnel became increasingly difficult, and the consultants refused to provide the source code to the company.

Six months after implementation, management decided to conduct a post-implementation review to determine whether the Customer Call Tracking System had achieved its objectives and to identify areas requiring improvement.

Required:

Evaluate **FIVE (5)** corrective actions that Home Sdn. Bhd. should implement following the post-implementation review to address the problems identified in the Customer Call Tracking System.

(10 marks)

(Total: 20 marks)

(TOTAL: 100 MARKS)

END OF QUESTION PAPER