UNIVERSITI
TEKNOLOGI
PETRONAS

FINAL EXAMINATION
MAY 2024 SEMESTER

COURSE : **TFB1143 - FINANCE INFORMATION SYSTEMS**

DATE : **2 AUGUST 2024 (FRIDAY)**

TIME : **3:00 PM - 6:00 PM (3 HOURS)**

INSTRUCTIONS TO CANDIDATES

1. Answer **ALL** questions in the Answer Booklet.

2. Begin **EACH** answer on a new page in the Answer Booklet.

3. Indicate clearly answers that are cancelled, if any.

4. Where applicable, show clearly steps taken in arriving at the solutions and indicate **ALL** assumptions, if any.

5. **DO NOT** open this Question Booklet until instructed.

Note :

 i. There are **SIX (6)** pages in this Question Booklet including the cover page

 ii. **DOUBLE-SIDED** Question Booklet.

1. a. Elaborate **THREE (3)** key elements that define Financial Intelligence which are financial literacy, budgeting & forecasting and investment knowledge.

[6 marks]

b. Explain how possessing financial intelligence skills can lead to deep stakeholder engagement and achieving effective financial management.

[4 marks]

c. Evaluate the importance of the Financial Intelligence Input Subsystem in internal control and risk management.

[4 marks]

d. A GreatRich Bank, aimed to enhance its financial intelligence capabilities by seeking a solution that would enable them to quickly comprehend vast amounts of data and gain insights to improve operations, customer service, risk management and decision-making.

i. Analyse how the chosen financial system can help GreatRich Bank improves its system's security.

[3 marks]

ii. Evaluate **ONE (1)** challenge that may be encountered during the execution of the proposed solution. Provide suitable examples to support your answers.

[3 marks]

2. a. Database System is a structured collection of data that can be easily accessed, managed, and updated. Explain **TWO (2)** main components of a database system.

[4 marks]

b. Explain **TWO (2)** types of databases commonly used in Finance Information System.

[4 marks]

c. Describe **TWO (2)** importance of a Database System in Finance Information System.

[4 marks]

d. **FIGURE Q2** shows an SQL query language to perform an operation. State the name of the Table created and all known Attributes based on the query.

```
SELECT Firm_name, Firm_ID
FROM Customers
WHERE location = 'Sarawak';
```

FIGURE Q2

[2 marks]

e. Elaborate **TWO (2)** challenges that might arise related to the database application and propose a solution for each challenge.

[6 marks]

3. a. Explain the objective of a Forecasting Sub-system and how it can help organizations on their financial management.

[4 marks]

b. Elaborate the functions and capabilities of a Forecasting Sub-system on having features like statistical and mathematical models and scenario analysis.

[4 marks]

c. Describe **TWO (2)** benefits of the Forecasting Sub-system to ensure the financial sustainability of an organization.

[6 marks]

d. Organizations use forecasting to create budgets, allocate resources, and set financial targets for the coming year. It helps in determining how much revenue needs to be generated and where expenses should be controlled.

   i. List **THREE (3)** relevant expenses (either direct or indirect cost) that shall be included in the financial statement of an organization.

[3 marks]

   ii. Analyze how Gross Profit and Net Profit differ in the context of a financial statement.

[3 marks]

4. a. Explain the objectives of a Funds Management Sub-system.

[4 marks]

b. Elaborate how one of the features of the Funds Management Sub-system which is Investment Portfolio Management can help a small business enterprise to manage its funds better.

[4 marks]

c. Evaluate how the Funds Management Sub-system contributes to optimized resource allocation and improved liquidity and cash flow within an organization.

[6 marks]

d. Varier University aims to efficiently manage its financial resources to support academic activities, research projects, infrastructure development, and administrative functions while ensuring financial stability and compliance with regulatory requirements.
Analyze the importance of cash flow management featured in the Funds Management Sub-system to support the university operations. Provide relevant examples.

[6 marks]

5. a. Explain the primary goals of the Control Sub-system in Finance Information System.

[4 marks]

b. Elaborate the importance of Internal Controls feature in the Control Sub-system.

[4 marks]

c. An organization is facing increased financial irregularities and potential fraud due to lack of authorized staff monitoring. Discuss how would the Segregation of Duties (SoD) address and mitigate these issues.

[6 marks]

d. Propose **TWO (2)** future technology for the Control Sub-system that could further enhance its ability to detect and prevent financial fraud, especially in a digital, globally connected financial landscape. Justify your design choice.

[6 marks]

-END OF PAPER-