

SECTION A

Answer **ALL** questions. This section carries **50 marks**.

Please click on this link to provide some module feedback so I can improve the module. This is completely anonymous.

<https://goo.gl/forms/wu2Plav7uN59aoBR2>

Thank you and Good Luck!
Zailan

QUESTION A1**CREDIT-CARD SYSTEM**

The following is the summary of business activities in a credit-card company.

1. Credit-card invoices received from the merchants are verified against the merchant and customer files for the following conditions: is the merchant a registered client, has the credit limit been exceeded, has the customer's card expired (exceeded its valid time period)? If the invoice has been rejected for any reason, the merchant is informed.
2. Payments are made to the merchant for all valid invoices. This involves computing the amount owed to the merchant by summing all the charges for each of the merchant's customers and subtracting a charge of three percent (3%) and the merchant is then paid the amount owing. The invoice is filed in the paid invoice file.
3. A list detailing charges for each customer is sent to the accounts clerk responsible for billing the customer. The accounts clerk updates the amount owing to the customer file.
4. At the end of the month a bill is prepared using the information in the customer file. The bill is mailed to the customer.
5. When a customer makes payment, the amount owing on the customer file is updated.

Note: State any assumptions made to support your answer.

QUESTION A1

Draw a context diagram for the Credit Card System.

[12 marks]

QUESTION A2

Develop a Level-0 Data Flow Diagram based on the context-level diagram from Question A1 showing all the major processes for the Credit Card System.

[26 marks]

SECTION B

Answer **ANY TWO (2)** questions from this section. This section carries **50 marks**.
Each question carries **25 marks**.

QUESTION B1

- a) PIECES is a framework that is used to identify operational problems to be solved and their urgency. **EXPLAIN** each element in the PIECES framework. (12 marks)
- b) Many organisations and independent business owners look forward to incorporating information systems (IS) to support their daily operations. That is when they raise systems requests asking for IT support in system enhancements, correction of problems, replacement of an older system, or developing an entirely new IS. There are numbers of common reason for them to request for systems.
- (i) **DESCRIBE** any **TWO (2)** common reasons for a system request. (5 marks)
- (ii) There are numerous factors that can affect an organisation in deciding whether or not to proceed with a system request. It could be internal or external factors. **STATE** any **EIGHT (8)** of the factors. (8 marks)

(Total: 25 marks)

