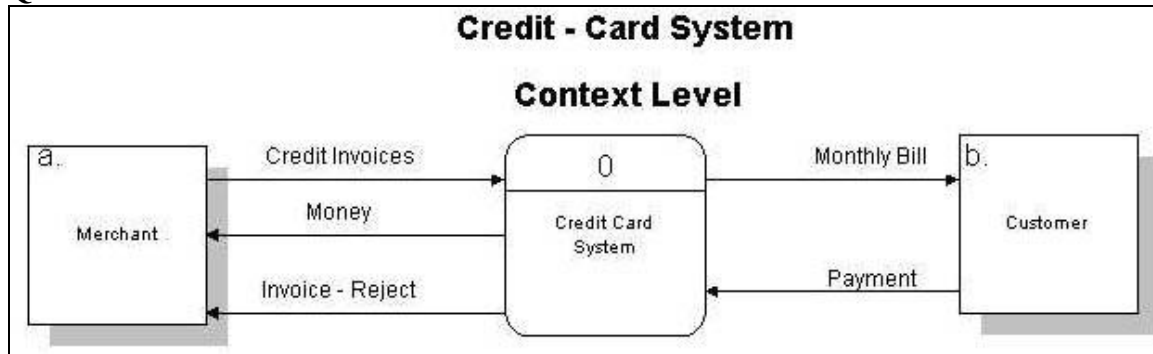
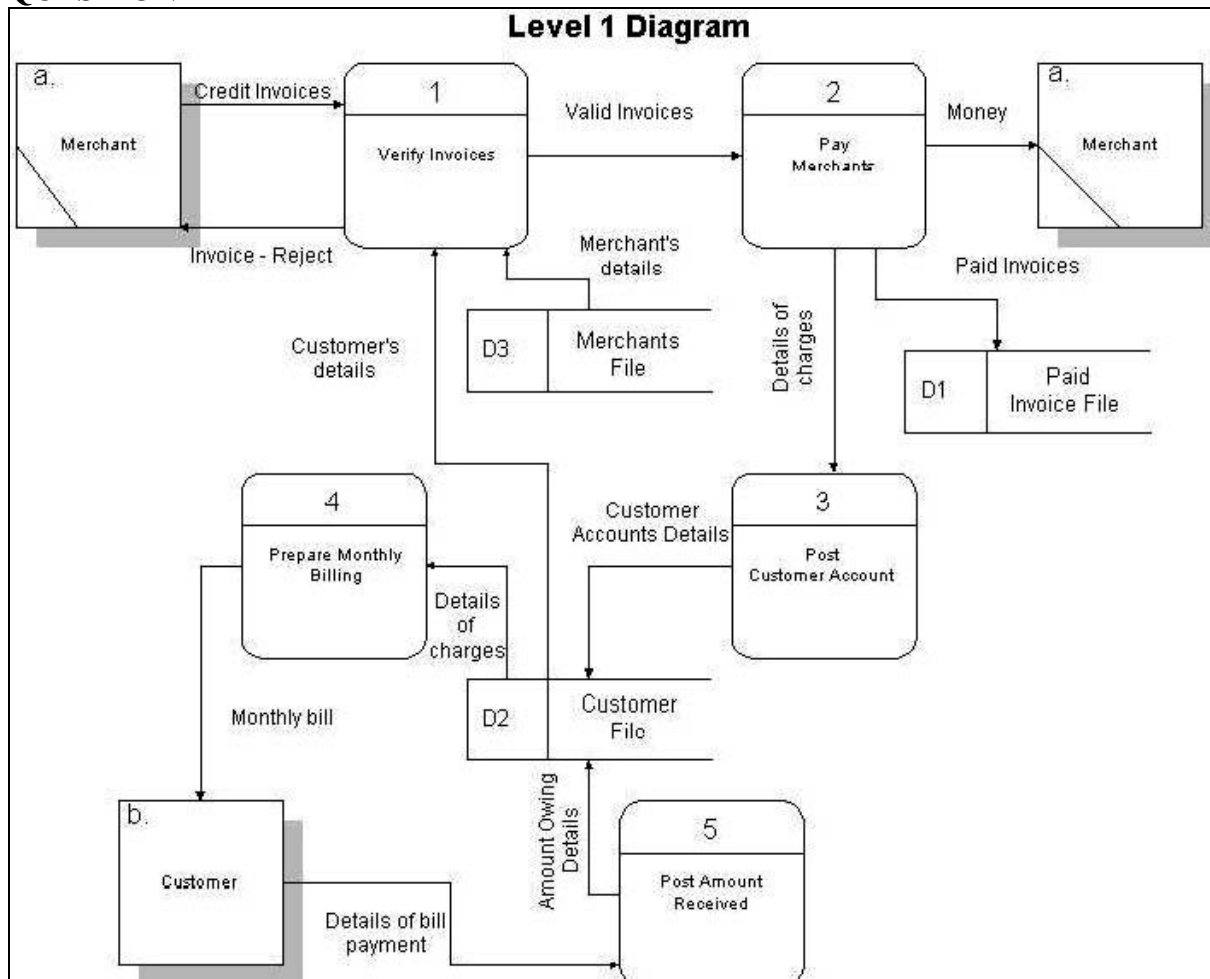


SECTION AAnswer **ALL** questions. This section carries **50 marks**.**Suggested Solution****QUESTION A1**

[12 marks]

QUESTION A2

[26 marks]

SECTION B

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

QUESTION B1

You have been hired to develop a new Online Library Management System for a local college and head a team of inexperienced developers. In order to help your team better understand interface design:

- a) PIECES is framework that used to identify operational problems to be solved and their urgency. **EXPLAIN** each elements in PIECES framework.

(12 marks)

Suggested Answer

PIECES framework

- **Performance** – Does the current mode of operation provide adequate throughput and response time?
- **Information** – Does the current mode provide end users and managers with timely, pertinent, accurate and usefully formatted information?
- **Economy** – Does the current mode of operation provide cost-effective information services to the business? Could there be a reduction in costs and / or an increase in benefits?
- **Control** – Does current mode of operation offer effective controls to protect against fraud and to guarantee accuracy and security of data and information?
- **Efficiency** – Does the current mode of operation make maximum use of available resources, including people, time, and flow of forms?
- **Services** – Does the current mode of operation provide reliable service? Is it flexible and expandable?

Marking Scheme

Award 1 mark for correct naming. (1 x 6 = 6).

Award 1 mark for correct explanation (2 x 6 = 6).

- 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)

Suggested Answer

- *Better performance* – The system performance might degrade with time and growth of data storage, and the users might request for the system to perform better for increased work efficiency.
- *Stronger controls* – Sensitive data might require additional security measures to ensure only the selected staff can access certain information. Perhaps biometric devices could be added to verify fingerprints or retinal scans to access sensitive information in the system.

Marking Scheme

Award 2 marks for one correct reason.

Award maximum of 5 marks for 2 correct reasons.

- (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)

Suggested Answer

- *Software and hardware vendors*
- *Technology*
- *Suppliers*
- *Customers*
- *Competitors*
- *The economy*

- *Government*
- *Existing systems*
- *IT Department*
- *User requests*
- *Top management executives*

Marking Scheme

Award 1 marks for one factor (8 x 1 = 8)