INFORMATICS

OXFORD BROOKES UNIVERSITY
BACHELOR OF SCIENCE (HONS) COMPUTING & INFORMATION SYSTEMS

AUGUST 2004 EXAMINATION

17 August 2004

M7011: MANAGEMENT INFORMATION SYSTEMS

TIME : **2 Hours + 10 Minutes Reading**

NUMBER OF PAGES : **1 Cover Sheet and 7 pages of Questions**

INSTRUCTIONS :

- ☐ ALL QUESTIONS in SECTION A are COMPULSORY and choose any THREE questions in SECTION B.
- ☐ Section A carries 25 marks.
- ☐ All questions in Section B carry 25 marks each.
- ☐ Please start every question on a new page.
- ☐ Answers will not be marked if they are illegible.
- ☐ Enter the question numbers (in the order you have attempted) in the boxes provided in the answer script.
- ☐ Write your INDEX NUMBER and MODULE NUMBER on the cover page of the answer script.

SECTION A

(Answer ALL questions in this section)

QUESTION 1

For **1a - 1j**, write the **Question. No.** and the most suitable answer (e.g. a or b or c or d) only.

[Question 1a to 1j: 1 Mark Each]

1 a) Summary transaction data, high-volume data, and simple models are information inputs characteristic of a(n):

a. DSS.
b. MIS.
c. ESS.
d. TPS.

1 b) The analysis of large pools of data to find patterns and rules that can be used to guide decision making and predict future behaviour defines:

a. data-mining.
b. data concatenation.
c. normalisation.
d. data warehousing.

1 c) A competitive strategy for developing new market niches for specialized products or services where a business can compete in the target area better than its competitors describes:

a. product differentiation.
b. focused differentiation.
c. market segmentation.
d. data-mining.

1 d) The expenses a customer or company incurs in lost time and expenditure of resources when changing from one supplier or system to a competing supplier or system are:

a. termination cost.
b. moving costs.
c. development costs.
d. switching cost.

1 e) Decisions that are repetitive, routine and have a definite procedure for handling them best describes:

a. unstructured decisions.
b. semi-structured decisions.
c. structured decisions.
d. strategic decisions.

1 f) Choosing the first available alternative to move closer toward the ultimate goal instead of searching for all alternatives and consequences defines:

a. muddling through.
b. satisficing.
c. bounded rationality.
d. Speculative decision making.

1 g) The term "logistics systems" is another name for:

a. shipping systems.
b. transportation systems.
c. merchandising systems.
d. delivery systems.

1 h) The electronic transmission of business data such as purchase orders and invoices from one firm's computer to that of another firm is known as:

a. electronic data transmission.
b. computerised data transmission.

c. electronic data interchange.
d. computerised data interchange.

1 i) The way a doctor diagnoses an illness is often:

a. a structured task.
b. a semi-structured task.
c. an unstructured task.
d. none of the above.

1 j) A course of action used to recover from occurrences that could shut down or do major harm to information systems called a:

a. recovery plan.
b. hot site plan.
c. back up plan.
d. disaster plan.

[TOTAL MARKS FOR QUESTION 1: 10 MARKS]

QUESTION 2

For parts 2a – 2e, write the **Question. No.** and the most suitable answer (e.g. *a* or *b*) only.

[Question 2a to 2e: 1 Mark Each]

2 a) Transaction processing systems help managers make decisions that are semi-structured, unique or rapidly changing and not easily specified in advance

a. TRUE b. FALSE

2 b) The sentiments and attitudes of workers in the organisation are one of the most important central organisation factor.

a. TRUE b. FALSE

2 c) From an economic standpoint, information systems can be viewed as a factor of production that can be freely substituted for capital and labour.

a. TRUE b. FALSE

2 d) Up to early 1990s, information systems have supported only a few of the roles managers play in organisations.

a. TRUE b. FALSE

2 e) MIS supports the decision stage of decision making.

a. TRUE b. FALSE

[TOTAL MARKS FOR QUESTION 2: 5 MARKS]

QUESTION 3

Explain the following (Minimum 4 to 5 sentences) :- **[Maximum 10 Marks]**

3 a) SQL Server.

3 b) Electronic Data Interchange.

3 c) Group Decision Support System

[TOTAL MARKS FOR SECTION A: 25 MARKS]

Section B

(Answer any THREE questions)

QUESTION 4

Answer the questions *(Qn. 4 a to Qn. 4 d)* based on the application scenario.

Triton Clothing Company is headquartered in a city on the West Coast. The firm produces highly stylish models of men's and women's denim and khaki western pants for distribution to clothing wholesalers and retailers throughout the western states. Triton maintains clothing manufacturing plants in three of these western states. Terry Burroughs has just assumed the post of production manager at Triton's Vesta plant. Formerly he had been assistant production manager at Triton's plant at Sterling. Burroughs was moved to the post to see if the Vesta plant productivity and profitability can be revived after several years of decline. Top management is not quite certain what the production problems at Vesta are. However, the plant has not met the production goals for the last two years, and management is hoping that a new broom will sweep clean.

When Burroughs first arrived at the Vesta plant, he decided to ask some of his plant managerial and supervisory personnel what they believe are the strengths and weakness of Vesta's production operations. In this way he hoped to gain insight into the nature of Vesta's production operations and to isolate problems that he could prioritise and then attack. Excerpts of some of the meetings follow.

Darlow Pruitt, the purchasing manager, complained that the purchasing department has been asked to use expediters too often to rush the delivery of raw materials. He feels that his department is not given sufficient warning about the status of raw materials to allow it to obtain the goods on time through regular channels. Pruitt complains that he does not have enough expediters to ensure that purchase orders of the raw materials that have been delayed by suppliers are filled on time to meet production schedules.

Pruitt also feels that production delays have been caused by too many stock outs for raw materials in the past. He thinks that these stock outs have occurred because there has been too much pressure to reduce the inventories as a means of decreasing manufacturing cost. The result of the stock outs, as far as he is concerned, is that expediters must deal with raw materials acquisition in a crisis mode.

Leavan Grant, supervisor of quality control, says that she does not have enough inspectors to ensure that the quality standards for raw materials and finished goods have been met. She notes that the variable quality of raw materials has caused too many delays in the production processes and this variability has also produced a high level of rejections of finished goods.

Bergon Trout, warehouse manager, complains that he lacks enough stock clerks to manage the inventory of raw materials, parts and finished goods the company maintains. He reports a number of instances in which raw materials that have been reduced to the reorder point were not identified and purchase orders for these materials were not made out. Trout is especially annoyed

that even standard raw materials from long-term suppliers are allowed to drop below the reorder point.
Tenlow Fenton, a shop-floor supervisor, charges that there are too many breakdowns in equipment- breakdowns that then delay production schedules. Fenton believes that the workers are reasonably satisfied with their work and are experienced at their jobs. He argues that equipment, not labour, is causing the delays.
Ruby Kent, the finance manager, thinks that too much money is being tied up in inventory and that these high inventories generate higher inventory taxes that must be paid to the local community.

Source: Booke,K., "TCC productivity takes off with imaging" The Industry Standard, June 14, 1999, p.116.

4 a) Given the data obtained in these interviews, what production problems seem to be occurring in the plant? **[6 Marks]**

4 b) How do you think these problems ought to be prioritised? **[6 Marks]**

4 c) What information systems should be considered to solve the problems? **[6 Marks]**

4 d) What software do you recommend that Burroughs consider to assist in solving these problems? **[7 Marks]**

[TOTAL MARKS FOR QUESTION 4: 25 MARKS]

QUESTION 5

The activities of an organisation are of three kinds: operational, tactical and strategic planning.

Explain the characteristics of **[Maximum 25 Marks]**

a) an operational information system?

b) a strategic planning system?

[TOTAL MARKS FOR QUESTION 5: 25 MARKS]

QUESTION 6

6 a) Describe five activities frequently performed by marketing research departments. How might computer information systems support each of these activities? **[10 Marks]**

6 b) What are the objectives of a recruiting system? How do various information systems support these objectives? **[8 Marks]**

6 c) Differentiate between comprehensive human resource software and limited-function human resource software. **[7 Marks]**

[TOTAL MARKS FOR QUESTION 6: 25 MARKS]

QUESTION 7

7 a) Identify and describe at least five business applications for which data communications systems are appropriate. **[10 Marks]**

7 b) List and describe five types of data validation controls. **[10 Marks]**

7 c) What are batch controls? Describe three types of batch controls. **[5 Marks]**

[TOTAL MARKS FOR QUESTION 7: 25 MARKS]

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