BSc. (Hons) Business Information Systems
Full Time (Year 2)
BIS 2112 - Management Information Systems
Examinations for 2002 - 2003 / Semester 01

Duration: 2 Hours

Instructions to Candidates:

1. Students are required to answer question 1 (compulsory) and any three from questions 2 to 5.
2. Students are required to answer on sheets provided to them

This question paper contains 5 questions and 6 pages.
**Question 1 [25 marks] - Compulsory Question**

I. Which of the following Information Systems can be classified as a Decision Support System? (Select all that apply). Justify your answer.

   [4 marks]

   A. A system that determines an optimal room rate given a particular data and occupancy.
   B. A system used by a Building and Construction company in order to track construction cost for its various projects across a region or country.
   C. A system that keeps track of personal records of employees within an organisation.
   D. A system that recommends the best route to ship ordered packages to clients.

II. Business to Business transactions can be performed through (pick any one):

   [2 marks]

   A. Local Area Networks
   B. Extranets
   C. Intranets
   D. None of the above

III. To ensure that hackers do not break into an Internet Banking System, what security issues should be provided? (Select all that apply). Justify your answer.

   [4 marks]

   A. Data entry controls
   B. User accounts and passwords
   C. A disaster plan
   D. A backup recovery plan
   E. A firewall
IV. Answer by TRUE or FALSE:
   i. The role of system analysts, within an organisation, is to act as a liaison
      between the Information System Department and the rest of the organisation.
      [1 mark]
   ii. Summary and exception reports are examples of Information outputs
      delivered by a Decision Support System.
      [1 mark]

V. "An Information System should provide good and valuable information to its
   users".
   a. Write short notes on ANY FIVE characteristics of "good" information.
      [5 marks]
   b. What do you understand by "valuable" information?
      [3 marks]

VI. Draw a diagram that could be used as model to represent all Information Systems.
    Your diagram should emphasize on the processes involved in an Information
    System.
    [5 marks]
**Question 2 [25 marks]**

(a) Explain the concept of data warehousing. Illustrate your answer with an example. [5 marks]

(b) Elaborate on the benefits of data warehousing within organizations. [5 marks]

(c) Write short notes on the following:
   1. Capacity planning [3 marks]
   2. Scalability [3 marks]

(d) What do you understand by the "TCO ownership model"? Explain how this model can be used to analyse the costs that managers must consider when selecting and managing technology assets. [5 marks]

(e) What do you understand by "e-commerce"? Name TWO different categories of e-commerce. [4 marks]

**Question 3 [25 marks]**

(a) Analyse the management problems raised by New IT Infrastructure and suggest solutions. [5 marks]

(b) Explain how Internet could be essential for Business Success of an organisation.
Elaborate briefly on any FOUR benefits Internet offers to Business Organisations. [2+ (4*2) marks]

(c) Write short notes on any TWO tools provided by the Internet to enhance communication within organisation. [3+3 marks]

(d) Distinguish between Enterprise Networking and Internetworking. [4 marks]
**Question 4 [25 marks]**

(a) Explain, with the help of suitable and clearly drawn diagrams, how organisations can be classified into open systems, closed systems, or relatively closed systems. Your diagrams should show clearly how these systems interact with their environment. You are also required to give an example of each type of system.

[8 marks]

(b) Draw a diagram to illustrate an organisation that follows a matrix structure.

[4 marks]

(c) Based on your diagram explain how such an organisation functions.

[3 marks]

(d) Write down the advantages and disadvantages of using such an organisational structure.

[4 marks]

(e) Compare and contrast tall organisational structures with flat organisational structures.

[6 marks]
Question 5 [25 marks]

(a) Explain the following systems and illustrate each answer with an example:

i. Decision support systems [3 marks]

ii. Transaction Processing Systems [3 marks]

iii. Knowledge Work Systems [3 marks]

iv. Show with the help of a diagram the flow of information from a TPS to a MIS. [9 marks]

(b) Explain in details what you need to know in order to implement an Information System for the Sales and Marketing Department for any organisation. Your answer should show the number of ways in which such an Information System would affect the functional running of an organisation. [7 marks]

***END OF QUESTION PAPER***

GOOD LUCK!