THE BRITISH COMPUTER SOCIETY

THE BCS PROFESSIONAL EXAMINATION
Advanced Diploma

MANAGEMENT INFORMATION SYSTEMS

18th April 2000 - 2:00p.m. - 5:30p.m.
Answer THREE questions out of FIVE. All questions carry equal marks.
Time: THREE hours.

*The marks given in brackets are **indicative** of the weight given to each part of the question.*

1.   According to Fidler & Rogerson (1996), Strategic Management Support Systems (MSS) are those MSS that are aligned with corporate strategy and mission. Describe the essential activities of Strategic Information Systems Planning (SISP) and explain how SISP can be used to aid the identification of Strategic MSS. Make sure you include suitable examples based on your reading and/or your practical experiences within your answer.
(25 marks)

2.   You are appointed as project manager for a system to record hospital patient details and to account for drug and other purchases related to medical operations.

    a)   Choose two alternative development approaches and explain and justify which of these would be suitable for the system described above. **(15 marks)**

    b)   Describe in outline and give examples of the type of management information that may be required by the hospital at the strategic and tactical level. **(10 marks)**

3.   Wine Barrel 2000 sells quality wine through mail order and has created a loyal and established client base. Customer research has established that at least half of their customers possess Internet PCs and consequently Wine Barrel 2000 want to reduce costs by providing a premium service for display and ordering of their products.

    a)   Explain what is meant by a free branded Internet Service Provider facility and how the provision of this would be of advantage to Wine Barrel 2000 and their customers. **(10 marks)**

    b)   Explain what is meant by an Extranet. How could an Extranet be used to assist with stock control and reordering from key suppliers? **(8 marks)**

    c)   Identify the barriers to the possible future use of e-commerce by Wine Barrel 2000 and their customers.
(7 marks)

4.   *a)*   Explain what is meant by each of the following MIS concepts:

        i)   Data warehousing **(4 marks)**
        ii)   On-line Analytical Processing (OLAP) **(4 marks)**
        iii)   Data Mining **(4 marks)**

    b)   Describe, with supporting examples, how Data Warehousing, OLAP and Data Mining facilities could be combined to provide a computer-based management support system. **(13 marks)**

5.   *a)*   "Developing a MIS is as much a social process as it is a technical one".

Describe **TWO** non-technical/social problem situations that a MIS development team might face during MIS development and suggest ways by which each of the problem situations could be addressed.

(10 marks)

b)   In the 1980s, a study showed that only a small number of managers were end-users of MIS and that many MIS were operated by technical specialists on behalf of management. Discuss why it is thought that the number of managers that are end-users of MIS has significantly increased since this study was performed. Use examples to support your answer.

(15 marks)