

THE BRITISH COMPUTER SOCIETY

THE BCS PROFESSIONAL EXAMINATION Professional Graduate Diploma

MANAGEMENT INFORMATION SYSTEMS

22nd April 2002, 2.30 p.m.-5.30 p.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. It has been said that current Management Information Systems (MIS) cannot adequately support the Strategic Management function of an organisation.
 - a) Describe the principal activities of the Strategic Management, Tactical Management and Operational Management functions within an organisation, and highlight the typical characteristics of the information needed to support each function. **(12 marks)**
 - b) Discuss the extent to which Executive Information Systems (EIS) and Decision Support Systems (DSS) are able to support Strategic Management. **(13 marks)**

2. A furniture manufacturing company is investigating the potential of using data warehousing and data mining to support its Sales & Marketing activities, and is seeking your expert advice.

Write a report to the Managing Director of the company, which:

 - a) Describes the essential features of data mining and data warehousing, and **(14 marks)**
 - b) Clearly shows how data mining and data warehousing facilities can work together to support the management of an organisation, with particular reference to Sales & Marketing activities. **(11 marks)**

3. Describe, with supporting examples, the ways in which THREE of the following technologies can be used in the provision of a company's MIS:
 - a) Videoconferencing
 - b) World Wide Web
 - c) Non-relational Database Management Systems
 - d) Knowledge-based Systems
 - e) Computer-Assisted Software Engineering (CASE) tools **(25 marks)**

4. You are required to provide the framework for an end-user MIS.
 - a) Identify and discuss five pre-requisites of a successful end-user MIS. **(15 marks)**
 - b) Explain how the success of the end-user MIS could be measured a year after implementation. **(10 marks)**

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5. Following two mergers, the organisation for which you work now has three legacy order processing systems that work reliably. In their current form these order systems cannot be linked to the Internet.

The Board of Directors is concerned that business will be lost to competitors with Internet order systems.

Write a report to identify THREE options that could provide the Internet ordering facility and discuss the advantages and disadvantages of each option. **(25 marks)**