



FINAL EXAMINATION 2005
BACHELOR OF TECHNOLOGY PROGRAM - COMPUTER ENGINEERING

ECU 4304 DECISION SUPPORT SYSTEMS

Date: 21st March 2006

Time: 9.30 – 12.30

Answer ONLY FIVE questions:

1. (a). What is a Decision Support System? Briefly explain. (5 marks)
(b). How does DSS differ from MIS? (5 marks)
(c). What are the specific areas, in an organisation, where DSS could help decision making? Describe the DSS you would recommend. (10 marks)
2. (a). Briefly explain the two levels of access controls that can be implemented in storage management. (10 marks)
(b). What are the features that should be incorporated in a storage management system, so that it can make use of the new techniques that the fast growing technology is giving today? (10 marks)
3. Today, IT plays a vital role in the business world. Almost all the organisations engaged in the business are using IT related resources and systems in their organisations to facilitate their daily work.
(a). Briefly discuss how investment in information systems can enable an organisation to gain an advantage over its competitors. (10 marks)
(b). You have been asked to help in the evaluation and selection of a "Paperless office" environment in your organisation. Briefly explain the criteria for choosing this system, with particular emphasis on the items you wish to see in the contract with the supplier. (10 marks)
4. (a). Briefly discuss the purpose of business information systems. (10 marks)
(b). Within a large complex industrial company it has been noted that many software projects have recently been delivered late and/or over budget. Produce practical proposals that will enable future projects to avoid such over-runs. (10 marks)

5. (a). What are the measures of monitoring the success of a project? (5 marks)
- (b). Briefly explain the three major aspects of any project that the Project Manager must control, and how they are related. (8 marks)
- (c). Why is it necessary to measure the processes that are carried out, the resources that are consumed and the quality of the resulting product, in any development project? (7 marks)
6. Structured software designing methodologies are becoming very popular these days.
- (a). Briefly explain the following terms:
- (i). Data Dictionary (2 marks)
 - (ii). Data Structures (2 marks)
 - (iii). Structured keys (2 marks)
- (b). What advantages can you obtain by using **structured** software designing methodologies? (5 marks)
- (c). Explain a few good features you can expect in well-designed software. (9 marks)
7. In the computer world, project management deals with the methodologies that are used to plan, implement and control a phased and structured development of software.
- (a). What are the measures for monitoring the success of a project? (10 Marks)
- (b). What are the 3 main factors involved in estimating a project. (5 Marks)
- (c). Why are Project Milestones essential? (5 Marks)
8. The market for software is increasingly a global one and your organisation will not succeed in that market unless you produce, and are seen to produce, quality products and services.
- (a). What do you mean by Quality Management in Software Industry? (5 marks)
- (b). When reviewing the quality of the product at the end of the production, you may find that its quality had been affected. Why? What are the factors that assist you in quality reviewing work? (10 marks)
- (c). What does software auditing achieve? (5 marks)
