UNIVERSITY OF LONDON

279 0060 ZB
996 D060 ZB

BSc degrees and Diplomas for Graduates in Economics, Management, Finance and the Social Sciences, the Diploma in Economics and Access Route for Students in the External Programme

Introduction to Information Systems

Monday, 22 May 2006 : 2.30pm to 5.30pm

Candidates should answer **THIRTEEN** of the following **SEVENTEEN** questions: **TEN** from Section A (40 marks in total) and **THREE** from Section B (20 marks each). **Candidates are strongly advised to divide their time accordingly.**

UL06/78

SECTION A

Answer all **ten** questions from this section (40 marks in total).

1. Explain **two** ways in which a knowledge work systems can help professional staffs to perform their jobs better.

2. Describe **one** way that a computer's operating system can manage the RAM of a computer so as to increase the apparent available memory space.

3. What is TCP/IP? Explain what it does to support network traffic.

4. A busy X-ray department in a hospital produces about 300 digital X-rays a week with an average size of 200 megabytes. Estimate how large the storage requirement would be to hold a month's data. (Note:1000 Megabytes = 1 Gigabyte)

5. Explain what is meant by the 'data-base approach' to the development of information systems.

6. What chart or graph would you choose in a spreadsheet package to display the percentages of sales that are made in one month in 20 different countries across Europe. Justify your answer.

7. What aspects of a new system's design can be captured in a levelled set of data flow diagrams?

8. Suggest **three** key features of e-commerce web sites aimed at individual consumers (B2C) which are likely to attract customers and persuade them to make purchases.

9. If you were responsible for purchasing a large software package for a company, what **three** criteria would you use in making the final choice between competing products?

10. Explain the principal qualities that you would need to work on a telephone help desk in the period shortly after the implementation of a new system in an organization.

SECTION B

Answer **three** questions from this section (20 marks each).

11. "It is seldom the case these days that an organization can justify an in-house development effort. Today, almost all business applications are supported by reliable packages from trusted vendors. Furthermore these packages encapsulate business best practice and almost remove the need for any extensive systems analysis". Discuss.

12. (a) Explain why, within the life cycle model of systems development, we need a phase of problem exploration before we move to a detailed feasibility study?

(10 marks)

(b) If you had the task of undertaking a problem exploration study, how would you approach the task? **(10 marks)**

13. (a) What is meant by the socio-technical approach to developing information systems? **(10 marks)**

(b) Describe the main advantages of this approach. How easy do you believe it is to make use of this approach in medium sized and large projects? **(10 marks)**

14. (a) Explain briefly the main areas of e-commerce activity that have grown up in the past decade. **(10 marks)**

(b) What advantages and disadvantages do existing and established firms face as they move more of their business on to the internet? **(10 marks)**

15. (a) Explain why a data model needs to be prepared as part of the systems analysis phase of the life cycle. What relevant information does the data model contain for analysts, other than as the outline design of a database? **(10 marks)**

(b) Show using an example how an n:m (many to many) relationship in a data model can be reduced to two 1:n relationships. **(10 marks)**

16. What criteria would you propose to judge the success of an information systems project?

Explain how it might be possible to collect information about each criteria you identify so that a final judgement can be made as to how well a project has performed and how good the resulting information system is.

17. Write a report to a government minister outlining the benefits and risks of a project to establish a national health information system, including fully computerised and sharable medical records for all citizens.

END OF PAPER