

UNIVERSITY of LONDON

291 0319 ZA

B.Sc. EXAMINATION 2008

for External Students

West Zone

COMPUTING AND INFORMATION SYSTEMS AND CREATIVE COMPUTING

**2910319 DECISION SUPPORT and EXECUTIVE  
INFORMATION SYSTEMS**

Duration: 2 hours 15 minutes

Date and Time: Friday 9 May 2008 : 2.30 – 4.45 pm

*There are FIVE questions on this paper.*

*Do not attempt more than **THREE** questions. All questions carry equal marks and full marks can be obtained for complete answers to **THREE** questions.*

A hand held calculator may be used when answering questions on this paper but it must not be pre-programmed or able to display graphics, text or algebraic equations. The make and type of machine must be stated clearly on the front cover of the answer book.

*Candidates are advised that their answers to all questions will be greatly strengthened by the citing of examples either of their personal experience or from written sources. Full referencing of sources is not necessary; an indication of the nature of the source is all that is required.*

**THIS EXAMINATION PAPER MUST NOT BE  
REMOVED FROM THE EXAMINATION ROOM.**

1. You have just graduated with a BSc in Computing and Information Systems, upper second division. Now you are considering a Master's degree but are unsure which subject to study or which institution to attend. Compare and contrast the theories of decision-making put forward by Herbert Simon and Henry Mintzberg in relation to the above problem.

[25]

2. The following table is a small sample of records taken from a much larger relational flat file showing the relationship between different types of vehicle sales in different regions of England and during particular months.

Vehicle Type	Region	Month/Year	Sales (£000')
Cars	Northern England	03/2007	34
Vans	Northern England	03/2007	28
Trucks	Northern England	03/2007	23
Cars	Central England	03/2007	36
Vans	Central England	03/2007	30
Trucks	Central England	03/2007	25
Cars	Southern England	03/2007	42
Vans	Southern England	03/2007	38
Trucks	Southern England	03/2007	30

Explain how the relational data could be reorganised to facilitate its use by a decision support system and give examples of the advantages that would accrue to decision-makers using this particular system.

[25]

3. A firm wishes to employ a trainee Facilitator to help run its well established Group Decision Support System (GDSS). Prepare a list of interview questions the you would ask a potential candidate. Explain fully what quality each question is supposed to reveal about the candidate that allows you to judge their suitability for the job.

[25]

4. A large company operates 50 retail outlets throughout the United Kingdom. It sells a range of central heating systems from a single manufacturer and also provides spare parts, routine maintenance and repairs.  
Head office has sufficient money to buy a Management Information System **OR** an Executive Information System, but not both.  
Outline the advice you would give the company to help it decide which system to choose.  
Illustrate your answer with examples relevant to the company's business.

[25]

5. Recently share prices in the United Kingdom have been difficult to predict given the credit crisis in global financial markets. As a result decision support systems, which rely only on simple linear forecasting models of past trends, are performing badly.  
Explain how the introduction of an Expert System component might enhance the performance of such decision support systems.

[25]

**END OF EXAMINATION**