UNIVERSITY OF HONG KONG
SUPPLEMENTARY B.B.A. FINAL EXAMINATION PART II

MANAGEMENT STUDIES: 123181
Analysis and Design of Business Information Systems
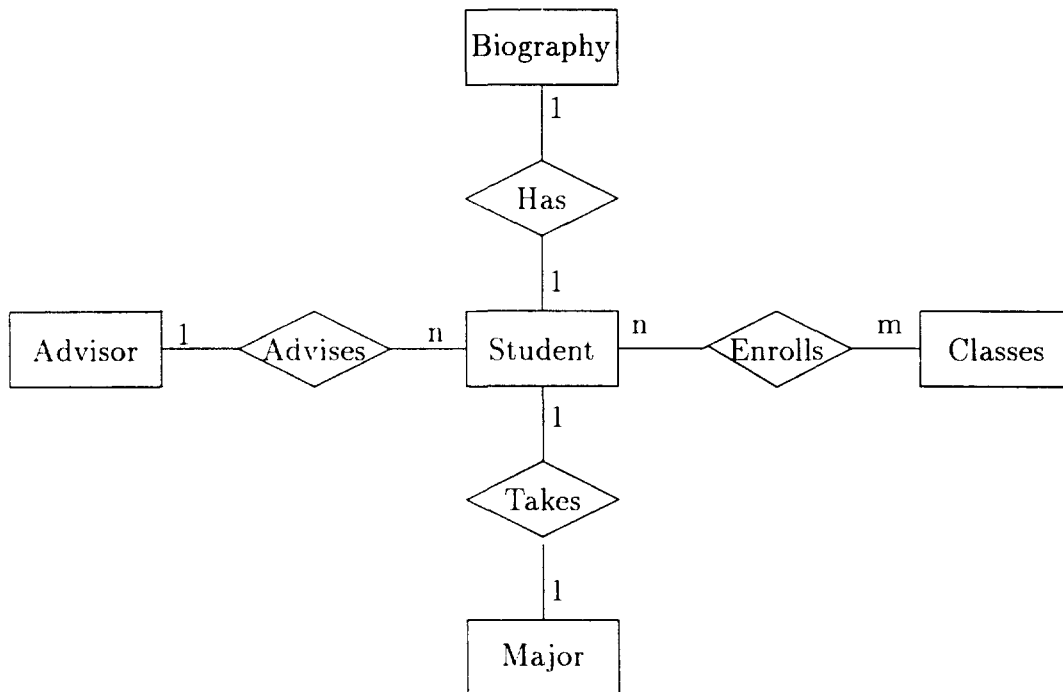
Sept 4, 1995   (9:30 a.m. - 11:30 a.m.)

Attempt any FOUR questions. (Each question carries equal marks.)

1

(i) Data modeling and process modeling are common in systems analysis. Describe what scope and levels of modeling are.   (15 marks)

(ii) Explain the symbols and the information given by the entity-relationship diagram as shown below.   (10 marks)

2

(i) A feasibility study is normally performed during the detailed analysis phase. What is a feasibilty study? Discuss.   (15 marks)

(ii) Construct a data flow diagram for the following simplified accounts payable system: Incoming invoices from the vendors are accumulated in an invoice data store and then reviewed by the accounts payable clerk. The invoices are scrutinized to ensure that they are valid and that they should be paid. The approved invoices are placed in the file. Each Thursday, the approved invoices are examined and selected for payment. Entries are made on the vendors' ledger cards (vendor accounts) and the accounts payable are updated. On every Friday the accounts payable manager who reviews the outstanding invoices and the accounts payable also writes the checks for payment of vendors. The checks are sent to the vendors. The checking account is updated with the check amount. (10 marks)

3

Describe in detail what should be done during the systems implementation and evaluation phase. (25 marks)

4

(i) Compare and contrast batch processing and interactive processing. (15 marks)

(ii) Describe a payroll application as an example of batch processing and the SABRE system as an example of interactive processing. (10 marks)

5

(i) Describe what a data dictionary and a query language and their functions are for a database management system. (15 marks)

(ii) Compare and contrast the advantages and disadvantages of using a database and a database management system. (10 marks)

6

(i) There are three difficulties that we have identified for information management. Describe them. (15 marks)

(ii) Are there any ways to tackle these difficulties? Discuss. (10 marks)