UNIVERSITY OF JOHANNESBURG

PROGRAM	:	BACHELOR OF TECHNOLOGY *ENGINEERING : INDUSTRIAL*
SUBJECT	:	**INFORMATION SYSTEMS 4**
CODE	:	**IIS 411**
DATE	:	SUMMER SSA EXAMINATION 2014 4 DECEMBER 2014
DURATION	:	(SESSION 2) 11:30 - 14:30
WEIGHT	:	40 : 60
TOTAL MARKS	:	100

ASSESSOR	:	MR P. DUBE
MODERATOR	:	MR N. NDOU
NUMBER OF PAGES	:	3 PAGES

INSTRUCTIONS TO STUDENTS

PLEASE ANSWER ALL QUESTIONS.
ANSWER THE QUESTIONS IN SEQUENCE

REQUIREMENTS
ONLY ONE POCKET CALCULATOR PER CANDIDATE MAY BE USED.
GRAPH PAPER

Question 1

1.1 List and briefly discuss the seven phases of the systems development life cycle (SDLC). (14)

1.2 Discuss the use of CASE tools. (6)

1.3 Discuss is the role of a systems analyst in the development of open source software? (4)

Question 2

2.1 Define enterprise systems. (4)

2.2 Discuss the problems encountered by analysts in trying to implement an ERP package, explain the impact of these problems to an organization. (10)

2.3 Explain the entity relationships in Figure 1 below (18)

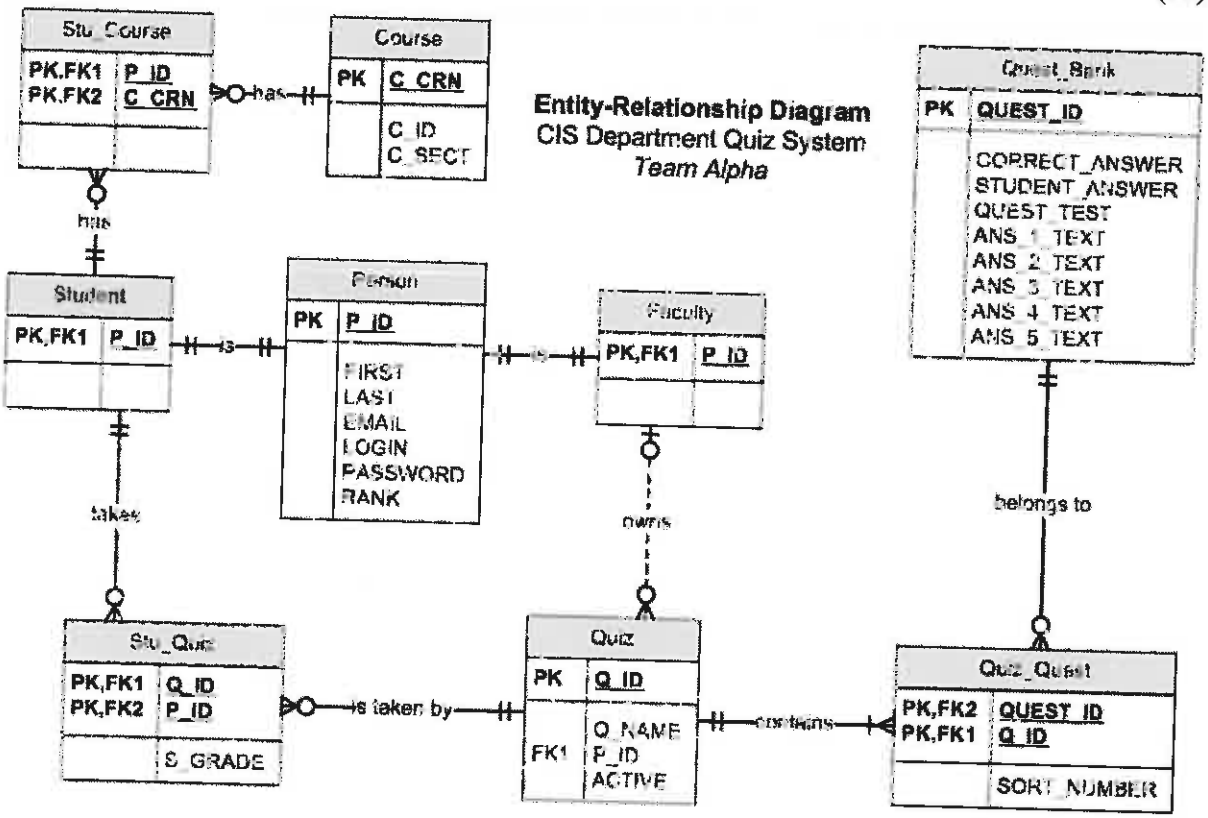

Figure 1

Question 3

3.1 Discusse the criteria for deciding whether a system should be prototyped. (4)

3.2 Explain four guidelines the analyst should observe in developing a prototype. (8)

3.3 Discuss the two main problems identified with prototyping. (4)

3.4 As part of a larger systems project, Clone Bank of Clone, Colorado, wants your help in setting up a new monthly reporting form for its checking and savings account customers. The president and vice presidents are very attuned to what customers in the community are saying. They think that their customers want a checking account summary that looks like the one offered by the other three banks in town. They are unwilling, however, to commit to that form without a formal summary of customer feedback that supports their decision. Feedback will not be used to change the prototype form in any way. They want you to send a prototype of one form to one group and to send the old form to another group.

3.4.1 In a paragraph discuss why it probably is not worthwhile to prototype the new form under these circumstances. (6)

3.4.2 In a second paragraph discuss a situation under which it would be advisable to prototype a new form. (2)

Question 4

4.1 Discuss three reasons for creating a logical data flow diagram. (6)

4.2 Burger King wants to install a system to record orders for the burgers. When regular customers call Burger King on the phone, they are asked their phone number. When the number is typed into a computer, the name, address, and last order date is automatically brought up on the screen. Once the order is taken, the total, including tax and delivery, is calculated. Then the order is given to the cook. A receipt is printed. Occasionally, special offers (coupons) are printed so the customer can get a discount. Drivers who make deliveries give customers a copy of the receipt and a coupon (if any). Weekly totals are kept for comparison with last year's performance. Write a summary of business activities for taking an order at Burger King

A summary of the business activities for Burger King is:

a. Display customer record. Input is the customer number and the customer record. Output is customer information.

b. Take customer order. Input is the order information (including the customer number). Output is the total amount due for the order.

a. Send order to cook. Input is the customer order. Output is the cook's order.

d. Print customer receipt. Input is the customer order and the customer master record. Output is the customer receipt.

e. Deliver customer order. Input is the customer receipt and coupons. Output is the delivered receipt to the customer.

f. Print weekly totals. Input is the customer order and the previous year's customer order summary. Output is the weekly performance figures.

4.2.1 Draw a context-level data flow diagram for Burger King. (8)

4.2.2 Explode the context-level diagram in Question 4.2.1 showing all the major processes. Call this Diagram 0. It should be a logical data flow diagram. (16)