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Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER II
SESSION 2018/2019

COURSE NAME	:	SYSTEM ANALYSIS AND DESIGN
COURSE CODE	:	BIT 20103
PROGRAMME CODE	:	BIT
EXAMINATION DATE	:	JUNE/JULY 2019
DURATION	:	3 HOURS
INSTRUCTION	:	ANSWER **ALL** QUESTIONS

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

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Q1   Answer **Q1(a)-Q1(c)** based on **Figure Q1**.

Uniqlo is a Japanese casual wear designer, manufacturer and retailer. Since it is a big company, it has to run the business using good Information System. The system involves several entity, data and processes. All transactions by the customers are recorded to assist managers in decision making regarding goods, sales, cost, revenue and inventory.

Figure Q1

(a)   Develop a context diagram for the case study in **Figure Q1**.

(6 marks)

(b)   Develop a level 0 diagram for the case study in **Figure Q1**.

(10 marks)

(c)   Develop a Decision Tree to show cash and noncash purchase in Uniqlo.

(10 marks)

Q2   Answer **Q2(a)-Q2(c)** based on **Figure Q2**.

UPS prides itself on having up-to-date information on the processing and current location of each shipped item. To do this, UPS relies on a company-wide information system. Shipped items are the heart of the UPS product tracking information system. Shipped items can be characterized by item number (unique), weight, dimensions, insurance amount, destination, and final delivery date. Shipped items are received into the UPS system at a single retail center. Retail centers are characterized by their type, uniqueID, and address. Shipped items make their way to their destination via one or more standard UPS transportation events (i.e., flights, truck deliveries). These transportation events are characterized by a unique scheduleNumber, a type (e.g, flight, truck), and a deliveryRoute.
Please create an Entity Relationship diagram that captures this information about the UPS system. Be certain to indicate identifiers and cardinality constraints.

Figure Q2

(a)   Draw an entity-relationship diagram based on the information provided in **Figure Q2**.

(18 marks)

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(b)   List types of relationship in an ERD and give **ONE (1)** example for each relationship.

(6 marks)

(c)   Describe each of the relationship in **Q2(b)**.

(6 marks)

Q3   (a)   Outline **THREE (3)** system acquisition strategies in developing a new system.

(3 marks)

(b)   Differentiate the acquisition strategies stated in **Q3(a)**.

(6 marks)

(c)   Based on the following scenario, which acquisition strategy is the most suitable to construct a system? Give strong justification for your answer.

(i)   BerjayaRental plan to have a new system for a multi-state chain of vehicle rental stores. Each store will run a fairly standardized set of processes (inventory, customer registration, vehicle rentals, vehicle returns, overdue fees, etc.). In addition, each store's system will be networked to the corporate offices for sales and expense reporting. It currently hired two system analysts graduated in Network.

(5 marks)

(ii)   BarangmurahUK Sdn. Bhd. is a personal shopper that sells goods from UK. In 2019, the sales increase dramatically. It plan to have a system that can give solution to sending bills and collect payments in real-time.

(5 marks)

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Q4   (a)   Identify **FIVE (5)** factors that need to be considered in selecting hardware and software.

(5 marks)

(b)   Imagine you will develop a Library System. Illustrate a storyboard of related screen for the system.

(10 marks)

- END OF QUESTIONS -