

# UNIVERSITI TUN HUSSEIN ONN MALAYSIA

## FINAL EXAMINATION **SEMESTER I** SESSION 2022/2023

COURSE NAME

: SYSTEM ANALYSIS AND DESIGN

COURSE CODE

: BIT 20103

PROGRAMME CODE

: BIT

EXAMINATION DATE : FEBRUARY 2023

**DURATION** 

: 3 HOURS

INSTRUCTION

- : 1. ANSWER ALL QUESTIONS
  - 2. THIS FINAL EXAMINATION IS CONDUCTED VIA CLOSED BOOK.
  - STUDENTS ARE PROHIBITED TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK

THIS QUESTION PAPER CONSISTS OF FOUR (4) PAGES



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Q1 (a) Answer Q1(a) (i) and Q1(a) (ii) based on Figure Q1.

Soc See Ying is a newly hired systems analyst. Soo has always felt that questionnaires are a waste. Now that you will assist Soo to develop a systems project for Megat Trucks, Inc., a national trucking firm with branches and employees in 130 cities, you want to use a questionnaire to elicit some opinions about the current and proposed systems.

Figure Q1

(i) Give THREE (3) persuasive reasons why he should use a survey for Figure Q1.

(6 marks)

(ii) Soo See Ying has agreed to use a questionnaire but strongly urges that all questions be open-ended so as not to constrain the respondents. Given your careful arguments on trade-offs involves with each question type, to persuade Soo that closed questions are useful as well.

(9 marks)

(b) Describe THREE (3) requirement analysis strategies.

(10 marks)

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

TeaLize Drink wants to install a system to record orders for tea and coffee drinks. When regular customers call TeaLize Drink 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.

### Figure Q2

(a) List all the entities.

(5 marks)

(b) Describe FOUR (4) processes.

(10 marks)

(c) Draw a Context Diagram.

(10 marks)

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Q3 Answer Q3(a) - Q3(c) based on Figure Q3.

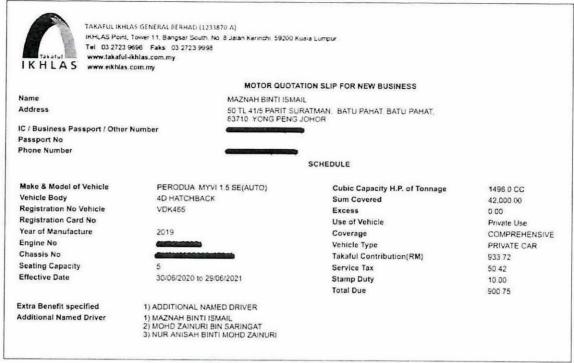


Figure Q3

(a) Write FOUR (4) entities.

(4 marks)

- (b) For each entity answered in Q3(a), write four attributes, and state the primary key. (8 marks)
- (c) Draw an Entity Relationship Diagram (ERD).

(13 marks)

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Q4 Based on Figure Q4, draw a form consist of menus. The menu provides the customer to enter her/his information, products and orders. For all three information categories, the customer be able to change, delete, find one specific record, or list all records.

Sharifah Pharmacy is a major pharmaceutical company in Batu Pahat. They want to go 'on-line' with an e-commerce pharmacy. Obviously, a lot of time and effort has gone into planning and analysis. They are working on the web user interface currently. They are considering the standard 'shopping cart' icon and metaphor. For patients ordering medications online, they need to capture the medication name (like Zocor).

#### Figure Q1

(10 marks)

Q5 Answer questions Q5(a) and Q5(b) based on Figure Q5.

BioFoods International is concerned with providing low-cost foods to nations that cannot afford the wholesome and nutritional foods that are so common in more developed countries. BioFoods International is adopting a new computer system that will enable their international managers to place orders with us directly, ensuring accurate and fulfilling orders to each of our constituents.

### Figure Q5

(a) Identify **TWO** (2) types of cultural requirements that should be considered in acquiring the new system.

(5 marks)

(b) Draw an architecture design for the system.

(10 marks)

-END OF QUESTIONS -

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