



**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER I  
SESSION 2012/2013**

COURSE NAME : SYSTEM ANALYSIS & DESIGN  
COURSE CODE : BIT 20103  
PROGRAMME : 1BIT/ 2BIT  
EXAMINATION DATE : DECEMBER 2012/JANUARY 2013  
DURATION : 2 HOURS AND 30 MINUTES  
INSTRUCTION : ANSWER ALL QUESTIONS.

THIS QUESTIONS PAPER CONSISTS OF FIVE (5) PAGES

- Q1**
- (a) Define Data Flow Diagram (DFD). (2 marks)
  - (b) Compare logical DFD to physical DFD. (4 marks)
  - (c) Create context diagram based on a summary of business activity for World's Trend Catalog Division in **FIGURE Q1**. (10 marks)
  - (d) Draw DFD level 0 showing general process based on answer **Q1 (c)**. (14 marks)

- Q2**
- (a) Outline **THREE (3)** guidelines in selecting structured decision techniques. (3 marks)
  - (b) Compare decision table to decision tree. (4 marks)
  - (c) List **FIVE (5)** steps that can be used in developing Structured English. (5 marks)
  - (d) Based on the Structured English below, develop a complete decision table.

**1.1 Check Patient Status**

**Process Description**

The purpose of this process is to ensure that we do not make appointments for patients unless their status indicates that we can. The process is as follows:

```

IF patient is a new patient
THEN perform Add New Patient Process
ELSE
    IF patient has unpaid bills
    THEN transfer the patient to the business office
    
```

(Dennis & Wixom 2003)

(8 marks)

- Q3**
- (a) Give a brief definition of Entity Relationships Diagram (ERD). (2 marks)
  - (b) Compare External Entity in DFD to Entity in ERD. (4 marks)
  - (c) Based on the DFD level 0 depict in **Figure Q3**,
    - (i) Develop a logical child diagram for process 1. (10 marks)
    - (ii) Develop an ERD for the system. (10 marks)
    - (iii) Draw a main interface for the system. (4 marks)
- Q4**
- (a) Describe the **FOUR (4)** participants of a JAD session. (8 marks)
  - (b) Based on the following scenario below, answer all questions:
 

Danish Perodua Sdn. Bhd. is a newly hired systems analyst with your group. Danish has always felt that questionnaires are a waste. Now that you will be doing a systems project for DRB-Hicom Sdn. Bhd., 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.

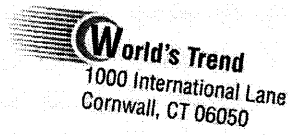
    - (i) Based on what you know about Danish and DRB-Hicom, give **THREE (3)** persuasive reasons why he should use a survey for this study. (6 marks)
    - (ii) Given your careful arguments, Danish has agreed to use a questionnaire but strongly urges that all questions be open-ended so as not to constrain the respondents. In a paragraph, persuade Danish that closed questions are useful as well. (6 marks)

- END OF QUESTION -

**PEPERIKSAAN AKHIR**

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World's Trend is a mail order supplier of high-quality, fashionable clothing. Customers place orders by telephone, by mailing an order form included with each catalog, or via the Web site.

**Summary of Business Activities**

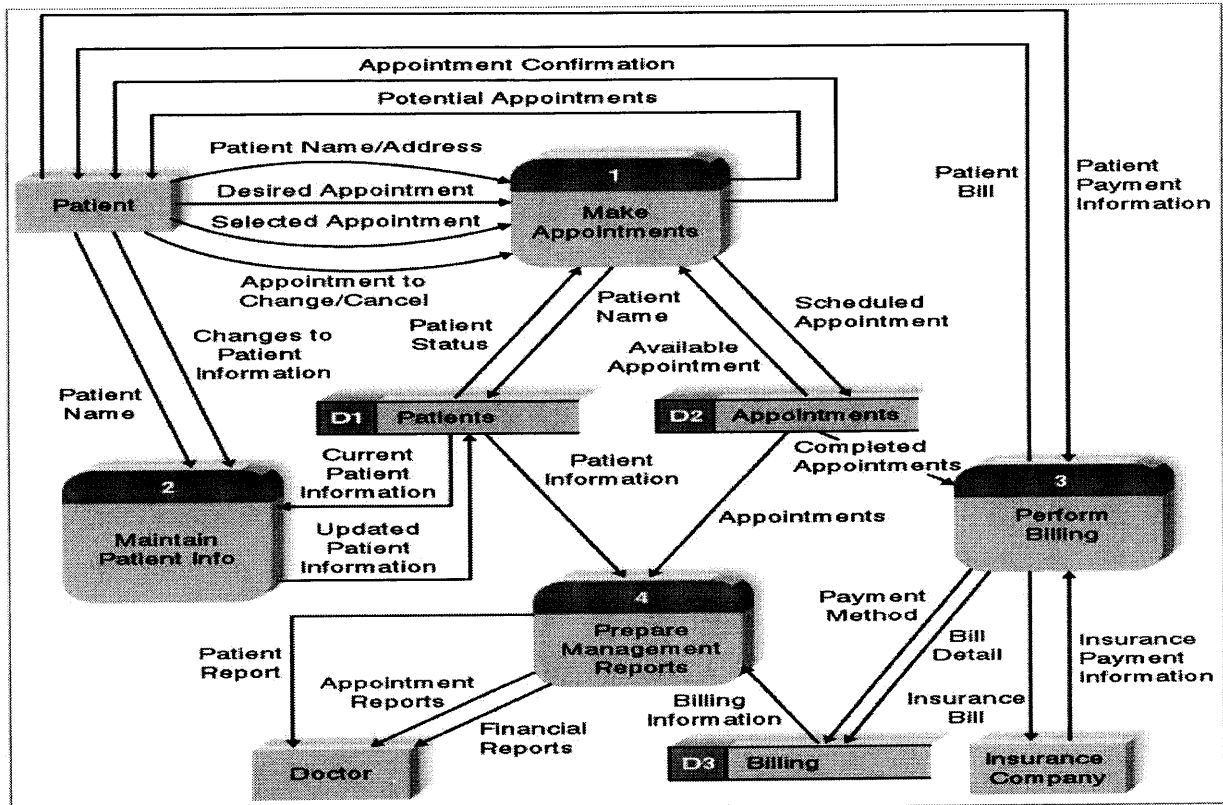
1. When customer orders come in, the item master and the customer master files are both updated. If an item is out of stock, the inventory control department is notified.
2. If the order is from a new customer, a new record is created in the customer master file.
3. Picking slips are produced for the customer order and sent to the warehouse.
4. A shipping statement is prepared.
5. The process of shipping a customer order involves getting the goods from the warehouse and matching up the customer shipping statement, getting the correct customer address, and shipping it all to the customer.
6. The customer statement is generated and a billing statement is sent to a customer once a month.
7. An accounts receivable report is sent to the accounting department.

**FIGURE Q1**

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**FIGURE Q3**