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FINAL
Examination Paper

(COVER PAGE)

Session : January 2015

Programme : Diploma In Information And Communication Technology
(DICTN/DICTI)

Course : ICT1106 / CSC1106 : System Analysis And Design

Date of Examination : March 10, 2015

Time : 2:00pm – 4:00pm Reading Time: Nil

Duration : 2 Hours

Special Instructions :

Answer any FOUR (4) questions.

Materials permitted : Non-Programmable Calculator

Materials provided : Graph paper

Examiner (s) : Mr. Tan Kok Cheng, Shahrman Mohd Said.

Moderator : Associate Professor Dr. Abdullah Gani

This paper consists of 4 printed pages, including the cover page.

INTI INTERNATIONAL COLLEGE SUBANG

DIPLOMA IN INFORMATION AND COMMUNICATION TECHNOLOGY
ICT1106: SYSTEM ANALYSIS AND DESIGN
FINAL EXAMINATION: JANUARY 2015 SESSION

Instructions: This paper consists of **SIX (6)** questions. Answer any **FOUR (4)** questions in the answer booklet provided. All questions carry equal marks.

Question 1

- (a) Define *information system*. Explain **THREE (3)** advantages of using information system. Give **THREE (3)** examples of information systems and briefly describe their use. (14 marks)
- (b) Explain **THREE (3)** responsibilities of a system analyst. Identify **FIVE (5)** skills that system analysts must possess in order to carry out their responsibilities effectively. (11 marks)

Question 2

- (a) Briefly discuss any **THREE (3)** reasons used by business executives to request for a new system. Prepare a sketch of a systems request form that may satisfy the reasons for a new system development. (14 marks)
- (b) Explain *operational feasibility*. State the **SIX (6)** factors you need to consider when you are evaluating this type of feasibility study. Identify the people who will evaluate this feasibility study? (11 marks)

Question 3

- (a) Explain the terms, *open-ended question* and *close-ended question*. State **SIX (6)** differences that exist between these two types of question. (10 marks)
- (b) Briefly explain the activities that are carried out in the following fact finding techniques: *interview, observation, document review, survey and research*. Arrange these techniques in the best order of execution when you do fact-finding. Explain your order of execution. (15 marks)

Question 4

- (a) Define *project management*. Explain the **FOUR (4)** management functions practiced in a project management. (10 marks)
- (b) The following table describes the costs and benefits of developing and operating a new system for the next several years.

Year	0	1	2	3	4	5	6
Costs (RM)	70,000	5,000	8,000	10,000	11,000	15,000	20,000
Benefits (RM)	10,000	30,000	50,000	90,000	120,000	125,000	130,000

Using the information from above, you are required to draw a graph and to identify the Payback period for this new system. In addition, you are also required to calculate the Return of Investment (ROI) for this new system for every year. What can you conclude from these Payback period and ROI?

(15 marks)

Question 5

- (a) The following is a description of an e-Sundry Shop System.

Any customer may place an order. The Sales Clerk will process the orders by checking the products ordered, adding the products into the delivery basket, and preparing a delivery list. When the delivery list is completed, the system generates the delivery order and informs the delivery boy. This system also allows a customer to check for the status of the order.

When the delivery boy delivered the products at the customer's home, the customer will make a cash-on-delivery payment. The delivery order boy will enter the amount received and confirms the payment into the system

Based on the above description, create a suitable *Use Case Diagram* for this e-Sundry Shop System

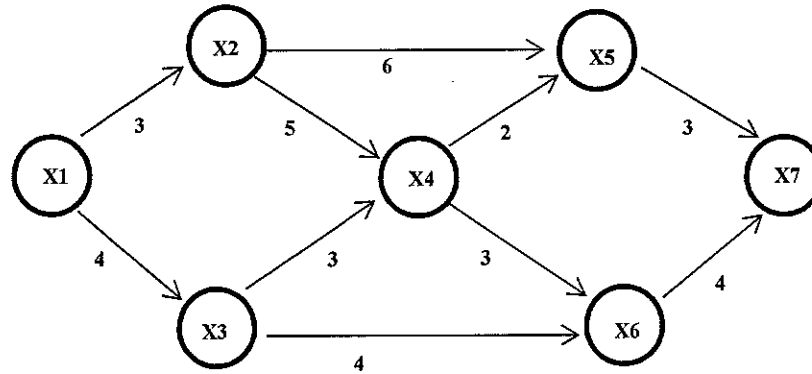
(11 marks)

- (b) Give any **TWO (2)** reasons why documentation is important in a given software development? Briefly discuss the **FOUR (4)** types of documentation created in a given system development life cycle.

(14 marks)

Question 6

- (a) Consider the following software development project with the following network of activities. The duration of the activities are measured in weeks.



You are required to do as follows:

- i. Determine the critical path of this project. Give a reason for your selection.
 - ii. Determine the Earliest and Latest Completion Times for each node.
 - iii. Can node X3 be delayed without delaying the entire project? If yes, how many weeks can it be delayed by? Justify your answer.
- (14 marks)
- (b) What is a *chargeback method*? Briefly describe the **FOUR (4)** methods used in chargeback.

(11 marks)

--THE END--