UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER II
SESSION 2011/2012

COURSE NAME	:	DECISION SUPPORT SYSTEM
COURSE CODE	:	BIT 3033/ BIT 30303
PROGRAMME	:	BACHELOR OF INFORMATION TECHNOLOGY
DATE	:	JUNE 2012
DURATION	:	2 HOURS AND 30 MINUTES
INSTRUCTION	:	ANSWER **ALL** QUESTIONS IN **PART A.** ANSWER **TWO (2)** QUESTIONS ONLY OUT OF **THREE (3)** QUESTIONS IN **PART B.**

THIS QUESTION PAPER CONSISTS OF FOUR (4) PAGES

PART A

Instruction: Answer **ALL** questions.

Q1 Decision Support System (DSS) is defined as a conceptual framework for a process of supporting managerial decision making, usually by modeling problems and employing for solution analysis.

    (a)   List **FIVE (5)** steps involved in the managerial decision making.

                  (10 marks)

    (b)   Define briefly **THREE (3)** common types of model in DSS.

                  (6 marks)

Q2   (a)   Distinguish between structured and unstructured problems.

                  (4 marks)

    (b)   Anthony's taxonomy of management can be explained at three levels - Strategic planning, management control and operational control.
Explain each of these taxonomy levels.

                  (9 marks)

Q3   (a)   Describe the approach of DSS development.

                  (8 marks)

    (b)   Describe **FOUR (4)** factors that are related to the quality of the user interface.

                  (8 marks)

    (c)   Describe **FOUR (4)** advantages and **FOUR (4)** risks of end-user DSS development.

                  (8 marks)

Q4   (a)   Briefly describe Simon's **FOUR (4)** phases of decision making.

                  (4 marks)

    (b)   Describe the basic component of a DSS.

                  (4 marks)

    (c)   Discuss the importance of decision styles.

                  (7 marks)

PART B
Instruction: Answer **TWO (2)** from **THREE (3)** questions.

Q5 (a) Describe THREE (3) elements when structuring decision problem.

(6 marks)

(b) Describe the decision using influence diagram.

(4 marks)

(c) Given the following scenario,

The BrightStar Sdn Bhd is a resort developer firm is planning to propose the new luxury resort in Mersing. The company has considered several securities on their guest and need more expenses for the program.

Model this decision based on your assumption.

(6marks)

Q6 (a) Define Group Decision Support System (GDSS).

(3 marks)

(b) Given the following case study,

In Ahmad Motors Company (AM), each model builds prototypes that cost about RM1 Million each and tests how they react to a frontal crash. Designing a new car is a complex and lengthy process. AM crashes these cars, makes improvements, and then crashes them again. Even as late as the 1990s, AM crashed as many as 70 prototype versions of each new model. The information regarding a new design collected from these crashes and other tests has to be shared among approximately 11,000 designers and engineers in hundreds of divisions and departments located all over the world. In addition, AM must communicate and collaborate with the design engineers of the more than 1,000 key suppliers. All this communication and collaboration slowed the decision process and increased costs. It took over four years to get new model to market and the new car often looked stale on arrival because public tastes had changed during the course of development.

Why did the project take so long?

(3 marks)

(c) Describe several approaches on GDSS how AM Company brings out more new car models more quickly.

(10 marks)

Q7 (a) List **THREE (3)** major differences between Business Intelligence (BI) and Decision Support System.

(6 marks)

(b) Read the following case study,

> Pricing was traditionally done manually by modifying the manufacturer's suggested retail price. Hypermarket is empowered to price each of the items it carries in the store in order to better compete locally. When a price war occurred or seasonal sales time arrived, prices were slashed across the board. The company is planning to use new DSS for price setting to undergo a radical change.

Discuss by giving an example how the new DSS can benefit from integration with business intelligence application.

(10 marks)

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