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**University Examinations 2015/2016**

FOURTH YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN COMPUTER TECHNOLOGY

**CIC 3426: DECISION SUPPORT SYSTEMS**

**DATE: NOVEMBER 2015 TIME: 2 HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

1. Explain **four** advantages of the end-user-developed DSS (4 Marks)
2. Describe the major task(s) of the system design and construction phases of the DSS development process. (4 Marks)
3. In which portion of the decision making process is a DSS most helpful for decision makers? Explain why? (3 Marks)
4. State the difficulties of decision making from the perspective of problem structure (2 Marks)
5. Describe Simon’s four phases of decision making (8 Marks)
6. Define sensitivity analysis and state its value to the decision maker. (3 Marks)
7. Explain the role of Internet in DSS development and Use (6 Marks)

**QUESTION TWO (20 MARKS)**

1. Outline **five** situations where data warehousing is most appropriate for organizations (5 Marks)
2. Explain **four** differences between individual versus group decision making (4 Marks)
3. Explain why a DSS is a powerful tool for decision makers (4 Marks)
4. The owner of a chain of auto-accessory shops in five different towns inputs sales figures into a computer model that displays the selling trends of each store. She uses her own observation form visits to the shops and information gained from the model to make ordering decisions for each store.

**Required:**

Are the ordering decisions she makes structured, semi-structured or unstructured? Briefly explain the reasons for your choice and outline what product related variables are involved in the ordering decisions. (7 Marks)

**QUESTION THREE (20 MARKS)**

1. Explain why decisions making is so complex in today’s business environment (5 Marks)
2. Specify the unique differences between decisions made in a group environment and a team environment. (4 Marks)
3. Explain how sensitivity analysis can help in the choice phase of decision making (3 Marks)
4. It is generally felt among DSS experts that the interface represents the single most important component in the system.

i) Explain why the user interface is an important component to a decision support system.

ii) Explain **three** kinds of interfaces that can be used for a DSS (8 Marks)

**QUESTION FOUR (20 MARKS)**

1. Define groupthink and produce an example of groupthink situation (5 Marks)
2. Explain why the understanding of decision makers’ decision styles important to the design and implementation of a DSS. (3 Marks)
3. Discuss the role of Decision Support System for Decision-Making Process in Business Environment (12 Marks)

**QUESTION FIVE (20 MARKS)**

1. Explain the concept of end user development (3 Marks)
2. Define individual decision makers and describe the various traits that affect the way they make decisions. (4 Marks)
3. Explain the role of a DSS to a decision maker (3 Marks)
4. Describe how DSS technologies and tools can aid in each phase of decision making

(10 Marks)