

KENYA METHODIST UNIVERSITY

TRIMESTER EXAMINATION

Jan - April 2008

FACULTY : SCIENCE AND SOCIAL STUDIES
DEPARTMENT : COMPUTER & INFORMATION SCIENCE
COURSE CODE : MISC 430
COURSE TITLE : DECISION SUPPORT SYSTEMS
TIME : 2 Hrs

Instructions: Answer Question 1 and other two Questions

Question 1 (20 Marks)

1. List and define the three phases of the decision making process.
(according to Simon) (6 Mks)
2. Define DSS (2 Mks)
3. Discuss the characteristics of DSS. (7 Mks)
4. List the major components of DSS and briefly define each term(5 Mks)

Question 2 (20 Marks)

1. Review what is meant by decision making versus problem solving.
Compare the two and determine whether or not it makes sense to distinguish between the two. (5 Mks)
2. Define a system and list its major components (8 Mks)
3. Compare the normative and descriptive approaches to decision making (4 MKs)
4. Distinguish between decision making under certainty, under risk, and under uncertainty. (3 MKs)

Question 3 (20 Marks)

1. Define a data warehouse and list some of its characteristics. (5 Mks)
2. Describe OLAP (4 Mks)
3. Define data mining and list its major technologies (6 Mks)
4. What are intelligent databases and why are they so popular? (2 Mks)
5. Define a data mart. (2 Mks)
6. Compare OLTP to OLAP. (1Mk)

Question 4 (20 Marks)

1. What are the major types of models used in DSS? (5 Mks)
2. Distinguish between a static and dynamic model. How can one evolve into the other. Give an example of each. (5 Mks)
3. What is a spreadsheet and what makes it so conducive to the development of DSS? (2 Mks)
4. What features make an OLAP system useful for decision makers? (3 Mks)
5. What is the role of heuristics in modeling? (2 Mks)
6. What is a model base management system? (3 Mks)

Question 5 (20 Marks)

1. Why is the role of KM so important for decision support? Discuss an example of how the two can be integrated. (3 Mks)
2. Observe an organization with which you are familiar. List three decisions it makes in each of the following categories: strategic planning, management control(tactical planning), and operational planning and control. (3 Mks)
3. You are about to buy a car. Follow Simon's four – phase and describe your activities at each step. (4 Mks)
4. Assume that a marketing department is an open system? How would you close this system? (3 mks)
5. Your company is considering opening a branch in Nairobi. List typical activities in each phase of the decision to open or not to open (intelligence, design, choice, and implementation). (7 Mks)