



**UNIVERSITY EXAMINATIONS: 2013/2014**  
**EXAMINATION FOR THE MASTER OF SCIENCE IN INFORMATION**  
**SYSTEMS MANAGEMENT**  
**MISM 5203 DECISION SUPPORT SYSTEMS**  
**DATE: AUGUST, 2014** **TIME: 2 HOURS**

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**INSTRUCTIONS: Answer Question One and Any Other Two Questions**

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**QUESTION ONE: [20 Marks]**

- (i) What is an influence (casual loop) diagram? Discuss its role in building a decision support system. (6 Marks)
- (ii) What are the strengths and drawbacks of influence diagrams as a problem structuring technique in developing a decision support system? (8 Marks)
- (iii) Give examples of problem structuring techniques used in developing decision support systems. (6 Marks)

**QUESTION TWO: (15 MARKS)**

- (i) Define what is a decision support system. Discuss the impact such a system would have on a decision-making effectiveness. (5 Marks)
- (ii) What are the different phases of the decision-making process a decision maker has to adopt using a decision support system? (5 Marks)
- (iii) What are the different types of decision support systems in use? (5 Marks)

**QUESTION THREE: (15 MARKS)**

A Decision Support System has potential to support the formulation, analysis and interpretation of business problems. From the current literature, describe how these issues relate to model-based decision support systems. (15 Marks)

**QUESTION FOUR: (15 MARKS)**

What would be the desirable features of a suitable graphical user interface (GUI) to support an effective decision-making process in organisations using specific decision support systems? Illustrate your case with diagrams. (15 Marks)