

MIDDLESEX UNIVERSITY

EXAMINATION PAPER

Academic Year 2012/2013

Mock Exam

BIS4410

Knowledge Management Strategies

Dr. Roman Belavkin

Time allowed:	2 Hours
Total number of questions:	Three
Instructions to candidates:	Answer any TWO questions. Each question is worth a maximum of 25 marks. The total (out of 50) will be converted to a percentage after marking.
Materials provided:	None
Equipment permitted:	None
Total number of pages:	2 including this page

No books, paper or electronic devices are permitted to be brought into the examination room other than those specified above.

Candidates are warned that credit cannot be given for work that is illegible.

Question 1

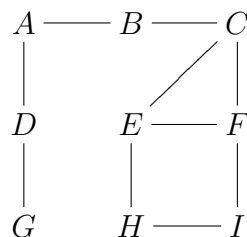
- a) Describe a technique for concept analysis. [8 marks]
- b) What are ontologies, and what are their main components? Discuss how ontologies are used in knowledge management. [12 marks]
- c) Describe the main approaches to knowledge representation. [10 marks]
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Question 2

- a) Describe the main sources of uncertainty, and explain how it affects decision-making. What is risk-averse and risk-taking behaviour? [10 marks]
- b) Schreiber et al. (1999) suggested three types of human experts: Academic, Practitioner and Samurai. Discuss their main characteristics. [9 marks]
- c) Discuss the relation between internalisation phase of the knowledge creation model by Nonaka and Takeuchi (1995) and knowledge application. Discuss why knowledge reuse is an important indicator of success of a knowledge management strategy. [11 marks]
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Question 3

- a) What is groupware? Give examples of groupware technologies and suggest their classification according to time and location. [8 marks]
- b) What is the purpose of Social Network Analysis (SNA) applied to a community of practice? Which methods can be used for SNA? [8 marks]
- c) Consider the following graph:



Answer the following questions justifying your answers: [9 marks]

- i) Is this graph connected? Fully connected? Regular?
- ii) Identify nodes with the lowest and the highest degrees?
- iii) Identify nodes that are 'bridges'?
- iv) Does this graph contain 'cliques'?
- v) What is the distance between *B* and *H*? Between *D* and *E*?
- vi) Which node has the highest centrality?