

UNIVERSITY OF BOLTON – RAK CAMPUS

**SCHOOL OF GAMES COMPUTING AND
CREATIVE TECHNOLOGIES**

COMPUTING PATHWAY

SEMESTER 2 EXAMINATION 2008/2009

SYSTEMS THEORY & PRACTICE

MODULE NO: MIT4108 DL

Date: Thursday 28th May 2009

Time (RAK): 1.00pm to 3.00 pm

INSTRUCTIONS TO CANDIDATES: There are FOUR questions.

Answer ANY THREE Questions.

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Computing Pathway
Semester 2 Examination 2008/2009
Systems Theory & Practice
Module No. MIT4108DL

QUESTION 1

Assess the potential for a tree structured taxonomy being used to classify information systems into categories.

13 marks

Explain the components identified within a system by Beer as part of his Viable Systems Model and draw a diagram to help explain how they interact.

20 marks

QUESTION 2

Many surveys have been done searching for the reasons for the success or failure in the development of information systems. Select five different reasons for failure and identify techniques that can help avoid such errors.

15 marks

Critically reflect on the extent to which a “learning organization” can avoid mistakes when attempting to develop solutions that utilize “leading edge” technologies

18 marks.

QUESTION 3

Hammer and Champy argued that Business Process Re-engineering should not be undertaken by teams based in Information Technology departments, yet suggested that solutions should take advantage of IT in proposed solutions. Analyse the apparent contradiction in this perspective and comment on the roles a BPR team need to have.

20 marks

Assess the extent to which the process of logicalisation within SSADM can be considered similar to the tasks involved within a BPR exercise.

13 marks

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QUESTION 4

Describe the role of the economic order quantity (EOQ) and the re-order level (ROL) used within stock control solutions.

10 marks

Compare the analytical approach to calculating these values with a simulation approach, referring to any assumptions made.

10 marks

Use the IDEF0 diagramming approach to provide a detailed model of how such a system can be designed and explain its operation.

13 marks

END OF QUESTIONS