

UNIVERSITY of LIMERICK

OLLSCOIL LUIMNIGH

COLLEGE of INFORMATICS and ELECTRONICS

Department of Computer Science and Information Systems

End-of-Semester Assessment Paper

Academic Year: 2007/2008 Semester: Spring Module Title: Enterprise Resource Module Code: CS4008

Planning

Duration of Exam: 2 ½ hours Percent of Total 80

Marks:

Lecturer(s): Michael T. Lane Paper marked out of: 80

Instructions to Candidates:

Please answer any 4 questions.

- Each question is 20 marks. Note that sub-parts of questions carry different amounts of marks.
- Q1. a) Describe various issues that may emerge from un-integrated Sales and Marketing information systems. Please support your answer by outlining a possible set of un-integrated order management processes in a company. Use examples of how issues might arise in your sample un-integrated system that result in the above outcomes for an organization.

10 Marks

b) Describe the main characteristics of an ERP system and outline how the integration of sales and distribution activities provided by ERP systems can help to overcome/avoid many of the issues outlined in answer a) above.

10 Marks

Q 2. a) Production planning involves effective scheduling of the production of goods. Describe three general approaches to production of goods and for each approach, give an example of a type of good that is suited to its application.

3 Marks

b) According to Monk & Wagner, production planners should follow three principles when approaching the scheduling of production. List and describe each of these principles.

5 Marks

c) List and explain each step of the production planning process. Please support your explanation of each step with an example of how it would be performed.

12 Marks

Q 3. a) Organizations whose information systems are not integrated do not necessarily suffer from an inability to actually make or produce goods. The main issue that they face is determining when they should produce goods and what quantities should be produced. Please discuss these statements and give examples of various production problems that may be encountered. Describe how these problems may be alleviated if the organization were to implement integrated information systems to support the production process. Please support your answer with examples.

12 Marks

b) Compare and contrast Supply chain management (SCM) and customer relationship management (CRM) systems.

8 Marks

Q 4. a) Describe the term "safety stock" and explain why it is used.

3 Marks

b) Explain why capacity utilization of 100% within your production planning would be undesirable – support your answer with two examples of situations that would adversely impact upon such a production planning approach.

3 Marks

c) You have been asked by an organization to explain to them why the implementation of an ERP system could greatly enhance their ability to conduct effective sales and operation planning. Outline how a sales and operations plan is constructed and then explain how incorporating data from different functional areas may lead to more effective planning. Describe how different modules of an ERP system may be used to access and use relevant data.

10 Marks

d) Sales and operations planning can be very well supported by an Enterprise Resource Planning system. However, your planning may still prove unsuccessful unless you consider additional "human factors". Discuss.

4 Marks

- Q. 5 You have been hired by an organization that is considering purchasing an ERP system. However, they are a little fearful of the implementation process and have asked you to provide them with an independent overview of what is entailed in an ERP implementation. They have asked you to appraise them of the major stages involved in the implementation process. Your answer needs to go through each phase and outline the high-level issues that need to be addressed by each phase.

 20 Marks
- Q. 6 a) Distinguish between work structures that are based upon process and functional roles. Outline the drawbacks of organizations that are structured on functional models and explain the benefits in moving to a more process-oriented structure. As part of your answer, describe any cases where you feel it may be preferable to have a department structured on a functional basis rather than a process basis. Please give examples to support your answer.

5 Marks

b) One might say that a tangible benefit is that which can be measured in financial terms. An organization may realize many tangible and intangible benefits following the integration of their business functions. Discuss.

7 Marks

c) When considering the adoption of an ERP system, a major part of the implementation usually involves the modification of business processes to comply with the suggested processes supplied by the ERP package. However, many organizations will require the retention of certain existing aspects of their business processes. They also will most likely need to retain much of the information that resides in the current files and data stores that they have used to manage their business. In many cases, they may also have to continue to use certain existing systems following implementation of the ERP system. Discuss how these issues are managed in the context of ERP implementations. Please emphasize any pitfalls that should be avoided in dealing with these issues.

8 Marks