

OLLSCOIL LUIMNIGH

Faculty of Science and Engineering

Department of Computer Science and Information Systems

End-of-Semester Assessment Paper

Academic Year: 2008/09 Semester: Semester 2

Module Title: Enterprise Resource Module Code: CS4008

Planning

Duration of Exam: 2½ Hours Percent of Total 70

Marks:

Lecturer(s): Norah Power Paper marked out of: 100

Instructions to Candidates:

Answer any five questions

Q1

Outline the four stages of manufacturing, giving examples of the type of products produced at each stage. Distinguish between discrete and continuous manufacturing in the context of the four stages. Explain why MRP is used more in discrete manufacturing.

Q2

Item Master Data is a core part of the manufacturing database. Briefly outline the other core data and summarise the main contents of the item master data, referring to both static data and active data. Briefly explain the role of Item Master data in Material Requirements Planning.

Q3

Discuss the four main pre-requisites of Material Requirements Planning. List the assumptions on which MRP is based and in the case of **any** two of them, show in detail how these factors influence the calculation of requirements.

Q4

Briefly outline the life cycle of an order in a manufacturing system. What data is needed for order release? Describe the process of order release, referring to the input and output data, and also to the checks that are needed before an order is released.

Q5

"The accuracy of the MPS varies over the planning horizon."

Explain this statement by reference to the different inputs to the Master Production Schedule.

Distinguish the MPS from the Production Plan.

Q6

"Products are costed automaticall using Bills of Material and Routings." Explain this statement referring to the use of the SAP ERP system.

Q7

Distinguish the two main functions of accounting and show in the case of each of them how an ERP system integrates business transactions with accounting data. Illustrate your answer with suitable example(s) of business transactions.

Q8

Define Rough-cut Capacity Planning, distinguishing it from Capacity Requirements Planning. Show how Rough Cut Capacity Planning is used in ensuring that a Master Production Schedule is realistic.

Q9

Briefly outline the sales order process in a manufacturing company. Describe how this process is integrated with the Master Production Schedule in the case of products that ar made to order.

Q10

Explain what you understand by the term Supply Chain Management (SCM). Outline the different kinds of flows that are managed in SCM. How does it derive some of its values from the principles of Just In Time systems?