

Ollscoil na hÉireann, Gaillimh

National University of Ireland, Galway

Autumn Examinations 2001/02

Third year Commerce Examination

Systems Analysis I (MS302)

Professor B. O'Keefe

Professor S. Collins

Ms. M. Hogan

Time allowed: TWO hours

Candidates should answer *THREE* questions

All questions carry EQUAL marks

Q.1.(a). What do you understand by the term *Feasibility*?

(5 marks)

(b) Describe, in detail, the following types of feasibility that should be assessed during the Feasibility Analysis stage:

- Operational Feasibility
- Technical Feasibility
- Schedule Feasibility
- Economic Feasibility

You should explain what is meant by each type of feasibility as well as how to measure them.

(28 marks)

Q.2.(a). Briefly describe the main project mismanagement problems that can cause a software project to fail.

(10 marks)

(b). Describe how a Work Breakdown Structure can be used to identify the project tasks for a software project.

(13 marks)

(c). Describe how a project manager might go about estimating task durations for a project. In your answer you should also consider the factors that must be considered during estimation.

(10 marks)

Q.3. Describe, in detail, the main activities of the Requirements Analysis stage of the Systems Development Life Cycle. You should describe the individual tasks, how they are carried out and the deliverables from each task.

(33 marks)

Q.4. Some of the main types of Graphical User Interface Styles include

- Windows and Frames
- Menu-Driven Interfaces
- Instruction-driven interfaces
- Question-answer dialogues

Describe, in detail, the main graphical user interface styles. You should also describe the considerations that need to be taken in to account when designing a user interface using those styles.

(33 marks)

Q.5. Galway Burgers Ltd. are developing a system to monitor changes in raw material inventory levels.

Changes to inventory levels are due to two types of transactions:

- Receipt of new inventory items from suppliers
- Consumption of inventory items from sale of products.

Inventory is added upon receipt of new raw materials for which Galway Burgers receives a supplier invoice. Each invoice indicates that a supplier has sent a specific quantity of one or more invoice items that correspond to Galway Burgers inventory items.

Inventory items are used when products are sold.

You are required to draw the Entity Relationship Diagram for the system described above. Specify all entities, relationships and cardinalities. You are also to suggest attributes for each entity and to specify the primary keys.

(33 marks)