

TDT4252/DT8802

Guidelines to answer exams questions 2012

*Note: these are guidelines; not the complete answers.
Relevant questions: 1, 2 & 4*

1. Enterprise Architecture (12%)

- a) The main role of an Enterprise Architecture is to bridge between the business strategy and IT strategy of an enterprise.
- b)
 - 1. Guidelines to analyse the business, technical and other aspects of an enterprise.
 - 2. A methodology to support the analysis and the change management of the enterprise (e.g. the ADM part of TOGAF, B, C and D steps).
- c) Zachman: Contains a very comprehensive taxonomy to analyse and model the enterprise, but does not provide a methodology to either analyse the enterprise or to support the evolution of the enterprise.
TOGAF: provides support for the analysis of the enterprise through identifying the business, information, data and technical architectures. TOGAF also provides a comprehensive methodology (ADM) to support the enterprise architecture work.

2. Enterprise Modelling and Evaluation of Models (20%)

a) Enterprise Modelling is about the enterprise, including business and other perspectives while modelling in the IT domain is about modelling an IT system. (Ref: Lecture 4, 2015, slide 14.)

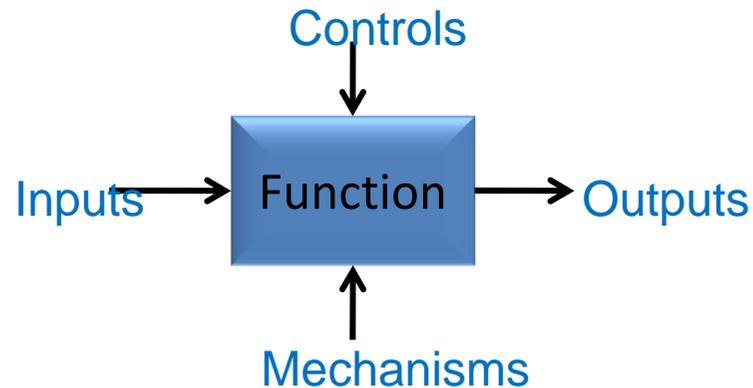
b) 1. Supports creating a common understanding of the enterprise.

2. Support better (strategic) decision making. (Ref: Lecture 4, 2015, slide 44.)

c) Main modelling concept: Processes, Products, skills and knowledge, Actors/organisation. Your model should include a simple process flow and structure (e.g. manufacturing should be one of the processes), process roles (related to actors), the product consisting of subparts, the skills required to produce the products, some actors with skills, that fill a role in the process.

d) You could use SEQUAL or competency questions.

4. IDEF0 Modelling



a) See figure. (Ref: Lecture 8a, 2015, slide 5.)

b) Inputs are transformed by the function into Outputs (e.g. raw materials into products).

Mechanisms are the resources that are required to produce the outputs. They may be consumed (e.g. money, electricity) or not (e.g. human resources).

Controls that guide or constrains the function, but do not get changed in the process, e.g. rules or requirements.

c) See example model in Lecture 8a, 2015, slide 9.