

# Exam problems

## Group C

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## Chapter 1

### Problem 1: Verification

**Proposition:** Verification is carried out to check that the product satisfies the requirements. This could be done in an acceptance test where the parties go through the requirements one by one and check that the product satisfies them.

**Reason:** Verification checks that all requirements match a demand and thereby have a purpose.

**Correct answer:** C

**Motivation:** The definition of “Verification” is described in “Proposition” and is therefore right. The description in “Reason” is incorrect since it does not describe the reason for doing “Verification”, but instead describes why you do “Validation”.

**Reference:** Lau: Chapter 1 page 6

**Learning objective:** 1.1.1, 1.1.3, (1.1.4)

**Main responsible:** Frida Hammarberg

## Chapter 2

### Problem 2: Data Model

**Proposition:** Data models provide a lot of overview of relationship between stored data, but they should be complemented with additional information such as data dictionaries to provide domain information.

**Reason:** Data dictionaries contain constraints and descriptions of its attributes and are in general easy for customers to understand and provide feedback on.

**Correct answer:** B

**Motivation:** Data models give good overview, but miss out on non-trivial information. Data dictionaries are a good way to cover this up, by providing in depth descriptions and examples. While data dictionaries introduce constraints on attributes and are good for getting customer feedback, the information in form of descriptions and examples are critical to cover the domain.

**Reference:** Lau: Chapter 2 pages 46, 56-57

**Learning objective:** 1.1.3

**Main responsible:** Filip Stenström

## Chapter 3

### **Problem 3: Task Descriptions and COTS**

**Proposition:** Task descriptions are suitable systems where the COTS-based systems used may change throughout the project

**Reason:** Task descriptions are on the domain level and involves no product design

**Correct Answer:** A (Both true, and the reason explains the proposition)

**Motivation:** COTS based system are suitable, since task descriptions are supplier-independent. Different COTS-systems may have different product designs, but still have the same domain. It's also true that the task description only works on the domain level. Because of this, we can change COTS-system, and thereby maybe the product design, without it affecting the task description since it's only works on the domain level. The reason therefor explains the proposition.

**Reference:** Lau: Chapter 3 page 100

**Learning Objectives:** 1.1.1, 1.1.3

**Main Responsible:** Christoffer MacFie

## Chapter 4

### **Problem 4: Decision tables**

**Proposition:** Decision tables are not suitable for describing business rules

**Reason:** It is impossible for the customer to validate and verify business rules described by a decision table.

**Correct answer:** E (Both the proposition and the reason are false.)

**Motivation:** The proposition is false - Decision tables are suitable for describing business rules provided that the rules are not too complex (loops and recursions should be avoided). The reason is also false - A decision table allows a precise description of rules and in contrary, these tables give a good opportunity to validate and verify business rules.

**Reference:** Lau: Chapter 4 pages 160, 163

**Learning objective:** 1.1.3

**Main responsible:** Natali Ljunggren

## Chapter 8

### **Problem 5: Cost/Benefit analysis**

**Proposition:** If a cost/benefit analysis result in a negative net value the manager will turn down the project.

**Reason:** A cost/benefit analysis is a comparison between the projects costs and its benefits, expressed in both money terms and qualities.

**Correct answer:** D (The proposition is false, but the reason is a true statement)

**Motivation:** The proposition is false because a cost/benefit analysis is expressed in both hard and soft factors. The hard factors can result in a negative net value, but the soft factors results might show that the project is crucial for the company. Then the manager won't say no to the project. The reason is true because it expresses the reasoning made above about hard factors (money terms) and soft factors (qualities).

**Reference:** Lau: Chapter 8, pages 347-348 & 360-363

**Learning objective:** 1.1.3, 1.1.6

**Main responsible:** Albert Johansson

### **Problem 6: Design Elicitation**

**Proposition:** Design workshops are often a great elicitation technique for designing user interfaces.

**Reason:** The users will make sure the developers don't get out of scope and keeps the scope within the business goals and tasks.

**Correct answer:** E (Both the proposition and the reason are false.)

**Motivation:**

Design workshops means that users and developers co-operate in the design process. The proposition is false because the result of a design workshop often is disastrous. This is because the users put too much effort on design and technical issues and gets infatuated by the solution and not the "why". The reason is false because of what's mentioned above and that makes them forget about business goals and other users in the organization.

**Reference:** Lau: Chapter 8, page 344

**Learning objective:** 1.1.3

**Main responsible:** Tobias Mähl