# Suggestions for Exam Problems

## Round 2

**Group H**
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**Problem 1:**

*Proposition:* Face-to-face communication works better than written specifications in an agile project.

*Reason:* The customer can change the direction of the project faster to suit their needs resulting in a better product for the costumer in the end.

*Correct answer:* A

*Motivation:* Having an open communication line as the customer input means there are no (or less) documents that need changing and thus reduces the time between the decision being made and the developers knowing where they should be going with the project.

*Reference:* AGRE P.62-63.

*Learning objective:* 1, 9, 14

**Problem 2:**

*Proposition:* When several independent companies develop separate parts of a whole system, early prototyping is discouraged.

*Reason:* Seeing as the early prototypes differ too much from the end product, they are often seen as a waste of time.

*Correct answer:* E

*Motivation:* Early prototyping of central parts of communication between the separate products are useful, and may prevent misunderstandings.

*Reference:* Lau:5 P.214 - 216

*Learning objective:* 15, 21

**Problem 3:**

*Proposition:* It is good to specify an upper limit on performance when constructing performance requirements.

*Reason:* You need to specify the systems capabilities in extreme cases.

*Correct answer:* D

*Motivation:* It is not a good idea to specify upper limits, as they can become very costly and/or impossible to implement. You do however need to specify the system behavior in extreme cases.

*Reference:* Lau:6 P.238 - 246

*Learning objective:* 1, 3, 11

## Problem 4:

*Proposition:* The two artifacts "defect" and "change request" refer to different things in regards to requirements maintenance.

*Reason:* Defects are problems or errors in the requirements, whilst a change request is made to fix a defect.

*Correct answer:* C

*Motivation:* The difference between defect and change requests is that a defect has to be corrected by the supplier free of charge, whilst change requests has to be paid for by the customer.

*Reference:* Lau:6 P.280 - 282

*Learning objective:* 12


## Problem 5:

*Proposition:* In a large system it can be good to specify response times for groups of functions instead of individual functions.

*Reason:* It can be very time-consuming to specify response times for each individual function, even though this may be desirable.

*Correct answer:* A

*Motivation:* It is desirable to specify response times for all functions in a system because otherwise it's possible to, theoretically, end up with a system that takes an hour to respond. If the system is large however this may be so time-consuming that more is lost than gained, and it can be a good idea to specify for groups of functions instead. Therefore, both proposition and reason are correct.

*Reference:* Lau:6, p. 238-246

*Learning objective:* 1, 10

**Problem 6:**

*Proposition:* In the release planning in iterative development, all iterations of the product are not releases of the product.

*Reason:* It is expected that demands will change over time, for instance due to competitors' moves and changing technology.

*Correct answer:* B

*Motivation:* In release planning in iterative development, the release is the last iteration. Product development is often used when the situation is as described in Reason.

*Reference:* Lau:8 P.326 - 327

*Learning objective:* 14

**Problem 7:**

*Proposition:* Ambiguity in a specification usually causes many problems in practice.

*Reason:* If a developer finds a requirement ambiguous, he may choose to implement it in a way that the customer does not want.

*Correct answer:* E

*Motivation:* If a developer finds an ambiguity he asks the customer what it means, if the developer does not find any ambiguities but misinterprets the requirement, he may implement something the customer does not want.

*Reference:* Lau:9 P.376 - 380

*Learning objective:* 1, 2, 18

**Problem 8:**

*Proposition:* Completeness means that all necessary requirements are included.

*Reason:* All the customer's expectations should be covered.

*Correct answer:* A

*Motivation:* Both the proposition and the reason is correct and the reason explains the proposition.

*Reference:* Lau:9 p. 376

*Learning objective:* 10,12

**Problem 9:**

*Proposition:* The QUPER approach is based on the hypothesis that quality is continuous and non-linear

*Reason:* The approach gives a graphical overview of benefit and costs versus quality

*Correct answer:* B

*Motivation:* The proposition is true, but it stands in contrast to the general misconception that quality is measurable. The reason is also true, QUPER offers graphs based on input, but the reason does not explain the statement.

*Reference:* QUPER, 2.1 (figures 2 & 3)

*Learning objective:* 8, 13


**Problem 10:**

*Proposition:* Release planning during agile development is usually very adept at fulfilling the demands of all stakeholders.

*Reason:* The releases in agile development rely on meetings with the stakeholders were the content of the release is negotiated.

*Correct answer:* D

*Motivation:* Release planning in agile development does not provide guidance on how to decide on features and priorities when multiple stakeholders are involved.

*Reference:* RP

*Learning objective:* 2, 13, 21