Group D - The Bonus Chance 2

Lau:5

Question 1. Platform Requirements

Proposition: The *platform* is the combination of hardware and software on which the product must run.

Reason: The platform comprises hardware, operating system, network system, and sometimes database system and other components. In nearly all cases these components are commercial products.

Correct answer: A

Motivation: Both statements are true. The difficulty in this question is knowing what is included in the *platform*. Is it just software, hardware or both? The reason explains the proposition since both hardware and software is included.

Reference:Lau: chapter 5.2 page 200

Learning objectives: 1, 3

Lau:6

Question 2. Design-level requirements

Proposition: Presume that the requirements document contains design-level requirements and that the analyst has done a good job with task analysis, prototyping and usability tests. Then both the customer and the supplier probably runs a low risk.

Reason: The analyst has taken full responsibility for the usability and little can be done to change the design. This is a good thing if the resulting usability really is adequate for the system.

Correct answer: A

Motivation: Both statements are true. If the analyst takes full responsibility of something and actually does a good job, then the risk should be low for both ends of the contract. The supplier has requirements which are easy to trace and verify, and the customer doesn't need to rely on the developers being good designers.

Reference: Lau 6.7

Learning objectives: 1, 2, 7, 11, 18, 19, 21

Question 3. Quality grid

Proposition: When creating a quality grid for specifying the importance of different quality factors, it is almost never necessary to balance the priorities.

Reason: Since it is most often not possible to fulfill all quality needs, it is better to ignore unimportant things and focus on the most important quality factors.

Correct answer: D

Motivation: The reason is a correct statement because no project has unlimited funding. Thus, one have to prioritize. This suggests that it in fact is important to balance the priorities in a quality grid. Hence, the proposition is false.

Reference: LAU 6.2

Learning objectives: 11, 13, 19

Question 4. Security requirements

Proposition: When specifying security requirements in practice, the analyst usually only identifies the more critical threats by doing a risk assessment.

Reason: Security requirements aim at preventing abuse cases rather than supporting use cases.

Correct answer: B

Motivation: The proposition is true because there are too many possible security threats to a system to consider every one of them. The reason is also obviously true, but it doesn't explain the proposition.

Reference: Lau 6.8 **Learning objectives:** 1, 3, 9, 10, 21

Lau:7

Question 5. Requirements traceability

Proposition: Embedding trace information in the code during development is a way to enable both forward and backward traceability between requirements and the final product.

Reason: Going from the code to the requirements is straightforward if there is a reference to the affected requirements in the code. Using a search tool, the opposite is possible.

Correct answer: A

Motivation: Both proposition and reason are correct.

Reference: Lau p. 314

Learning objectives: 7

Lau:9

Question 6. Completeness

Proposition: Completeness means that all necessary requirements are included. **Reason:** This means that all the customer's and the supplier's expectations are covered including all trivial and non-trivial requirements.

Correct answer: C

Motivation: According to Lauesen's definition of completeness it is enough to include all the necessary requirements in order to reach completeness, but this does not include trivial requirements; *"most requirements are so trivial that you shouldn't try to specify them. If you tried, the spec would be so long that it would lose more important qualities such as being understandable."* The focus also lies in covering all the necessary requirements so that the customer's expectations are covered, not the supplier's (that part was included in order to add learning objective 7 to the list).

Tl;dr: the proposition is correct, the reason is false.

Reference: Lau: chapter 9.1 page 376

Learning objectives: 1, 4, 7, 12

Question 7. Consistency

Proposition: In the requirements document, stating the delivery date of the product is considered as an inconsistent requirement.

Reason: This may be in conflict with the sheer complexity of the product - it might be hard to do it in the specified time, but some adventurous supplier might try anyway.

Correct answer: A

Motivation: According to Lauesen stating the delivery date (even in the contract) is considered as an inconsistent requirement. So the proposition and the reason are correct and the reason also explains the proposition correctly.

Reference: Lau: chapter 9.1 pages 377-378 **Learning objectives:** 1, 4, 12

QUPER

Question 8. QUPER

Proposition: The QUPER method provides cost estimates and income values for each planned release.

Reason: QUPER's "cost view" consists of a non-linear graph of cost estimates for different release configurations. QUPER's "value view" consists of a non-linear graph of the predicted income of the different release configurations.

Correct answer: E

Motivation: QUPER provides assistance during release planning, but the goal is not to estimate cost and income directly. The cost view shows the identified cost barriers, i.e. where a small quality increase corresponds to a large cost increase. The "value view" is called "benefit view" in the literature and displays the so-called breakpoints, where quality reaches a useful, competition-differentiating and excessive level respectively.

Reference: QUPER p.284-285

Learning objectives: 9, 13, 17

AGRE

Question 9. Benefits of Iterative RE

Proposition: Iterative RE has two reported benefits:

- A more satisfactory relationship with customer
- Requirements are clearer and more understandable.

Reason: Because of the immediate access to the customer when needed.

Correct answer: A

Motivation: The study in [AGRE] has shown this to be the case.

Reference: [AGRE]: Iterative RE: Benefits; page 64

Learning objectives: 2,9,17

INTDEP

Question 10. Inspecting Requirements

Proposition: Inspection is an efficient way to review documents or program code with the intention of correcting errors and other anomalies.

Reason: When the inspection is done in a systematic way you are more productive and the result will be more complete.

Correct answer: D

Motivation: You inspect to identify requirements, not to correct them. Reference: INSP;3.6.1 Learning objectives: 12