Exam problems 1

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Group F

Alexander Badju, Fredrik Helander, Jonathan Klingberg, Jonathan Knorn, David Lundberg & Niklas Sjöberg

Problem 1: COTS-based acquisition [LAU:1]
Proposition: When acquiring *COTS-based* development tools,
focusing on the domain level requirements is a good approach.
Reason: Developers of COTS systems have little knowledge about the customers domain requirements.
Correct answer: The correct answer is **E** (Both are false and should be the other way around).
Motivering: In the procurement of an already existing system you can assume that the developers for that system already have taken the domain requirements into account since they are specialists in the domain.
Reference: (p.9 & p34-35 chap. 1.7.2 The fast approach: domain-level requirements)
Learning objectives: 1.1.3, 1.1.4, 1.2.1, 1.3.1
Main responsible: Jonathan Klingberg

Problem 2: Data model/expressions [LAU:2]
Proposition: When data expressions are used to describe parts of a data model, the two techniques supplement each other.
Reason: Data models are insufficient for describing details, special cases and the relation to domain concepts.
Correct answer: B (Both the proposition and the reason are correct statements, but the reason does not explain the proposition.)
Motivation: The reason implies that data expressions supplement data models by being good at describing details, special cases and the relation to domain concepts. This isn't true, data expressions are good at describing details at an abstract level, but special cases and relations to domain concepts are better covered by data dictionaries.
Reference: p.56, 64
Learning objective: 1.1.4
Main responsible: Jonathan Knorn

Problem 3: Feature Requirements [LAU:3]
Proposition: It is often difficult for developers to validate feature requirements.
Reason: Customers often dream up a lot of features, which might make the system unrealistic.
Correct answer: D
Motivation: Developers verify (verification) the final product using the originally specified features as a reference. The customers validate (validation) that the requirements match the business goals & demands. The reason would fit the proposition if it asked why it's difficult for developers to verify the requirements.
Reference: Lau: Chapter 1.1 page 3 (validation & verification), Lau: Chapter 3.4 pages 86-87
Learning objective: 1.1.1, 1.1.2.
Main responsible: David Lundberg

Problem 4: State diagrams [LAU 4]
Proposition: State diagrams are an excellent basis for development and testing in large scale software development projects.
Reason: State diagrams can retain their readability even if they extend over several pages. State diagrams are also, in many cases, readable to the customer.
Correct answer: A
Motivation: Both proposition and reason are true statements. Reason explains the strengths of state diagrams.
Reference: LAU p. 168-170 State diagrams
Learning objective: 1.1.1, 1.1.3
Main responsible: Fredrik Helander

Problem 5: Interviews [LAU 8]
Proposition: *Mental blindness* is a big issue when eliciting requirements through interviews with test persons.
Reason: When interviewing test subjects about how they would perform a given task, they have a tendency to lie deliberately to the interviewer when confronted about how they would perform the task. They do this to not seem stupid or because they want to answer what they think the interviewer wants to hear.
Correct answer: The correct answer is C. (The proposition is true but the reason is false).
Motivering: *Mental Blindness* is a problem when eliciting requirements. However, it is NOT because the test subjects *deliberately lie,* when asked how they would perform a task. They actually think they perform it in a certain way. In reality this might not be the case, proven through observation tests.
Reference: P. 340-341, 8.2.3 Observation
Learning objectives: 1.1.3, 1.1.4, 1.1.7
Main responsible: Alexander Badju

Problem 6: Focus groups [Lau 8]
Proposition: A focus group is a good elicitation technique for coming up with future system ideas as well as realistic ideas.
Reason: In one of the phases carried out in focus groups the participants try to imagine the ideal way of doing things.
Correct Answer: D (The proposition is false, but the reason is a true statement)
Motivation: It is true that a focus group is good at coming up with future ideas. However, it is not good at coming up with realistic ideas, so the proposition is false. After the participants have identified problems in the current way of doing things, they try to imagine ideal solutions, so the reason is true.
Reference: Lau pages 338, 343, 352-354.
Learning objectives: 1.1.1, 1.1.3
Main responsible: Niklas Sjöberg