Exam problems ETS170 – Second submission

Group J

Problem 1

Proposition: When integrating a new product with an old system, the customer should always do the work themselves instead of the main contractor.
Reason: The main contractor could be either the product supplier or the customer's IT department and they should be responsible for the integration due to their technical expertise.
Answer: D
Motivation: The integration of new products to old systems should always, if possible, be done by the main contractor and not by the customer because even simple integrations can cause endless problems for non-specialists.
Reference: [LAU 5] page 204-205
Learning objective: 1

Problem 2

Proposition: There is no way of measuring if a system fulfills the usability requirements until the system is fully functional.
Reason: To measure the usability requirements a facilitator and a log keeper observes when a potential customer tries to carry out different tasks on the system.
Answer: D
Motivation: The reason is true but the tests with a customer can be done with a mockup of the real system.
Reference: [LAU 6] page 248-252
Learning objective: 1, 3, 4

Problem 3

Proposition: Quality requirements are often viewed as very important according to many requirement engineers.
Reason: Group A have to delay requirements until next release but all quality requirements are implemented as they are always mandatory.
Answer: C
Motivation: Quality requirements can for some projects be very important for e.g. a system that requires very fast response time can be worthless without its quality requirements. On the other hand for a different project e.g. search engine one might not achieve the wanted result but will still render a usable result and thus not be mandatory.
Reference: [LAU 6] page 217
Learning objective: 1, 3

Problem 4

Proposition: A good way to measure usability requirements is to count the number of problems a novice encountered using a specific part of a system.
Reason: The advantage with this kind of measurement is that the requirement can in an

early state of the project be tested.
Answer: A
Motivation: The two statements are true and the reason explains the proposition.
Reference: [Lau 6] page 258
Learning objective: 1, 3**,** 4

Problem 5

Proposition: Letting a customer rank and give different requirements a weight often gives the developer problems hence customer often gives all requirement a high weight.
Reason: A way to work around the problem with customer given requirements to high weight is to ask the customer ”what would you do if nobody could give you this?”
Answer: B
Motivation: Both of the statements are true but the reason does not explain the proposition.
Reference: [Lau 7] page 304
Learning objective: 1, 2

Problem 6

Proposition: Ambiguity in requirements often causes many problems.
Reason: The developer might think he/she understands the requirements, while the customer means something else.
Answer: D
Motivation: Ambiguity doesn’t cause many problems in practice, as the developer often just asks the customer. This doesn’t happen if the developer thinks he/she understands the requirement, though.
Reference: [Lau 9] page 376
Learning objective: 1, 2, 4, 16, 19

Problem 7

Proposition: A CRUD check is useful for detecting missing or inconsistent parts of a specification.
Reason: Extending CRUD to CRUDO (O for Overview) is useful, as some way of getting an overview or searching among the entities is often necessary in a program.
Answer: B
Motivation: The two statements are correct, but the reason doesn’t explain the proposition; it rather extends on the proposition.
Reference: [Lau 9] page 386
Learning objective: 4, 16, 19

Problem 8

Proposition: The QUPER-model is used to support and provide concepts for qualitative reasoning of quality levels in decision-making when a software company is setting the targets of the Quality Requirements for a coming release of a product. It aims to support the ability to make early estimates with adequate accuracy of Quality Requirements.
Reason: Quality Requirements is very important in software development and needs to

be considered early during system analysis and relations between quality requirements, their market value and cost can be complex and therefore difficult to estimate with adequate accuracy in an early stage.
Answer: A
Motivation: The proposition is correct because one the goals of the QUPER-model are to define a model for specification, quantification and prioritization of QR. The reason is correct because quality requirements are extremely important in software development and architectural design and needs to be considered, specified and quantified early during system analysis rather than later in the development stage.
Reference: [QUPER] Sections: Abstract, 1 and 2.1
Learning objective: 3, 18, 19

Problem 9

Proposition: In agile RE an extensive and formal documentation of specifications is most often used.
Reason: Because requirements don't change or evolve often in agile RE, a formal documentation needs to be set and followed from the beginning of the development project.
Answer: E
Motivation: The proposition is incorrect because agile RE aims to transfer ideas effectively from the customer to the development team rather than to create documents of specifications.
The reason is also incorrect because it is exactly the opposite in agile RE. Requirements often change or evolve during the project, sometimes so much that some requirements are not even appropriate anymore when the project is coming to an end.
Reference: [AGRE] page 60, 63
Learning objective: 2, 6, 19

Problem 10

Proposition: When working with release planning it is important to choose one approach e.g. science of RP.
Reason: Different approaches can't be combined since it will disrupt each other's benefits.
Answer: E
Motivation: By creating synergy between different approaches one can achieve optimal RP feature assignments.
Reference: [RP] page 47
Learning objective: 1, 7