Examination questions - part 2

Group G

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Question 1

Proposition:
Specifying all reports to be created by the system to be built can be postponed and still controls the cost

Reason:
Since its already specified that the system should make reports, they might as well be specified during the implementation phase

Correct answer: C

Motivation:
The proposition is true since speciftying the reports to be outputed by a system can be delayed. The reason is false since it does not control the cost and should rather be telling something about requirements with prices per report to be implemented.

Reference: Lau:5 p195-196

Learning goals: 6,7

Question 2

Proposition:
Many requirement specifications contains much fewer quality requirements than functional requirements.

Reason:
Since quality requirements are non-functional they are conceived to be unimportant compared to functional requirements, but that impression is wrong

Correct answer: A

Motivation:
The proposition is true since most requirement specifications contain much more function requirements than quality requirements. The reason is true since many people look past the need for quality requirements

Reference: Lau:6 p217

Learning goals: 1,3,4

Question 3

Proposition:
It's essential that a quality requirement must be quantifiable and firmly specified

Reason:

If the runway of an airport is exactly 2000 m, it would be quite unwise to buy an airplane that requires 3000 m to land. A loosely specified requirement could have catastrophic consequences because of this physical limit, why a strict requirement is needed.

Correct answer: D

Motivation:

The proposition is false since there may exist both requirements with open targets, and even open metrics, as well as those with strict targets, depending on what is to be specified. The explanation is true since this is an example of when a strict target is a must because of physical limitations, where an open target could indeed be potentially dangerous.

Reference: Lau:6 p228-229

Learning goals: 1,3,4,11

Question 4

Proposition:
The ISO 9126 list of quality factors is superior to that of McCall.

Reason:

ISO 9126 uses more updated terminology and has six quality factors

Correct answer: D

Motivation:

Proposition is false, since different lists of quality factors have different relevance depending on project. The reason is correct. It contains six quality factors and they did update the terminology into what they believed to be better.

Reference: Lau:6 p220-223

Learning goals: 1,3,4,6

Question 5

Proposition:

Comparing proposals in a highly stuctured way with weighted results will clearly distinguish the best choice of supplier.

Reason:

Experience shows that weighted results will help to get a more objective overall result.

Correct answer: E

Motivation:

Proposition is false. Comparing proposals is a hard task and most times there will be no clear best choice. Reason is false, since results will be a rough guideline to be used subjectively.

Reference: Lau:7 p298-302

Learning goals: 1,2,6,8,21

Question 6

Proposition:

While executing risk assessment, customers and developers should initially work independently.

Reason:

They often value risks in a similar manner, so by letting two different groups look for the same sort of risks will increase the chance of finding common risks.

Correct answer: C

Motivation:

Proposition is true, reason is false. A risky requirement on the customers end is often considered low-risk on the developers side. This different aspect is the reason to why they should work independently.

Reference: Lau:9 p392

Learning goals: 1,12

Question 7

Proposition:
During a review meeting, it's useful to also discuss possible solutions to a problem

Reason:
Developers and the customer may help solve the problem on the spot which can save time, instead of forcing the analysts to solve it by themselves later

Correct answer: E

Motivation:
Proposition is false because the review meeting should focus on explaining the problems, not solutions. Explanation is false because such discussion may lead to tedious overdrawn debates about trivialities, instead of focusing on what the meeting is really about (stating problems)

Reference: Lau:9 p390

Learning goals: 1,12

Question 8

Proposition:
One effective way of determining quality requirements is by comparing cost to its market differentiation.

Reason:
If a product holds a low level of quality it may not be able to compete with other similar products or in worst case not even work at all. Reversely, unnecessarily high quality may be way too costly without adding any significant value

Correct answer: A

Motivation:
The proposition is true since this one of the core principles of QUPER which argues that the level of quality should be set high enough to differentiate from competitors, but not unnecessarily higher than that. The explanation is true because this is referring to the benefit and cost view (and their break points) in QUPER displaying the levels of quality that is needed to reach market differentiation and the costs needed to implement, including cost spikes that may occur and certain break points when e.g. new hardware is needed.

Reference: QUPER:p283-285

Question 9

Proposition:
During agile requirements engineering, prototyping is rarely used
Reason:

Prototyping often creates unrealistic expectations among customers
Correct answer: D

Motivation:

The proposition is false, since prototyping is an established agile RE practice. The reason however is true - itâs a known challenge encountered during prototyping.
Reference: AGRE: p55

Learning goals: 1,9,17

Question 10

Proposition:
A major challenge during release planning is optimally selecting and scheduling features over releases
Reason:

Cost and effort estimation of features is generally fraught with uncertainties
Correct answer: B

Motivation:

The proposition and reason are true. However, the proposition is not alone mainly explained by uncertain estimations - rather many other factors also play a role in this challenge, such as weighting in all parameters (feature dependencies, resource constraints etc.) and the satisfaction of different stakeholders for different release plan options etc.
Reference: RP: p48-49

Learning goals: 1,2,17