Hand-in W6

6 problems (one per person) that cover:

[Lau:5,7] 1 problem - Christoffer Stengren

[Lau:6, QUPER] 1 problem - Johan Calvén

[Lau:9, INSP] 1 problem - Fredrik Pettersson

[MDRE+PRIO+RP] 2 problems - Simon Thörnqvist, Julia Mauritsson

[AGRE+INTDEP] 1 problem - Robin Ljungström

Question 1.
Proposition: When dealing with technical interfaces, the hard requirements are crucial when two independent developers develops separate parts of the product.
Reason: As the requirements is a high-risk requirement, it's it generally a good idea to make a proposal to the customer explaining the situation. The proposal should say its cost and why, offer a reasonable alternative and eventually offer the full solution as an expensive option to ensure that an mature customer will choose you as a supplier over one that disregard the risk.
Correct answer: B
Motivation: Both the proposition and reason are true, but the reason does not explains the proposition. It may be so that an interface requirement is a high risk requirement, but the reason does not explain if and why a hard requirement is crucial or not. They are however very crucial as they let two independent developers integrate their parts together. If they did not exist then two developers may develop its own independent interface, making it a lot harder to integrate, wasting time and effort. The reasoning is also correct. If you don't do as the reasoning says you will eventually need to implement the requirement. This may lead to a failed project as it may take longer or cost more than what the customer can afford. By preparing the customer for the requirement instead, and making an optional solution you look like a professional, furthering your chance of you being picked as a supplier.
Reference: Lau: Chapter 5, Chapter 7.
Learning objective: 1.1.1, 1.1.2, 1.1.4
Main responsible: Christoffer Stengren

Question 2.

Proposition: We have a usability problem when the system fails to carry out an intended task.
Reason: It is crucial to detect and repair as many usability problems as possible that may exist before doing any programming. A way of doing so is to make simple prototypes to test on the typical user.
Correct answer: D (Proposition is false, but the reason is a true statement.)
Motivation: The proposition is false because a usability problem is when a user can't figure out how to to do a task, or the user doesn't like how it is performed. A system that fails to carry out an intended task is a requirement defect. The reason is true because repairing a usability problem on a finished software product is very time consuming. A software with serious usability problems will not be liked by the consumers, and this means its value on the market will be very low. By testing a prototype of the system on test subjects (users), the developers can find out what problem the users encounters and repair them before any programming have been done.
Reference: Lau: Chapter 6, QUPER.
Learning objective: 1.1.1, 1.3.4, 1.3.5
Main responsible: Johan Calvén

Question 3.

Proposition: That a requirement specification fulfills the quality criteria completeness means that all necessary requirements are included.
Reason: Most requirements are so trivial that you should not 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 balance in practice is to ensure that all non-trivial requirements are specified, and in particular to ensure that all business goals and critical issues are covered.
Correct answer: A
Motivation: Both the proposition and the reason is true and the reason explains the proposition. Some might have a misconception about this, arguing that completeness implies that you have a requirement for everything. However, making sure that all the customer's expectations are covered is enough to fulfill this criteria.
Reference: Lau: Chapter 9 INSP
Learning objective: 1.1.4,
Main responsible: Fredrik Pettersson

Question 4.

Proposition: Reprioritization using prioritization techniques with an ordinal or absolute scale are easier performed than using techniques with a ratio scale.
Reason: Prioritization techniques with an ordinal or absolute scale can just assign a value or a priority to a new or changed requirement. Prioritazation with a ratio scale is more complex due to the need to be compared to every other requirement to ensure correct relative priorities.
Correct answer: A

Motivation: Both the proposiotion and the reason is ture and the reason explains the proposition. Prioritization on an ordinal or absolute scale does not introduce any major challanges since there are no relations between the priorities on the requirement so new requirements are just given a value. Prioritization with a ratio scale can introduce problems when requirements change, are added or deleted since it is dependent on all of the other priorities for calculating the relative priorities correctly.
Reference: PRIO, 4.6.2
Learning objective: 1.1.4, 1.2.5
Main responsible: Simon Thörnqvist

Question 5.

Proposition: Product Roadmaps is a part in the investment cycle.
Reason: Product-Technology Roadmaps is available in several segment of society to support decision makers in the route to innovation.
Correct answer: B
Motivation: Both the Proposition and the reason is true but the statements has to deals with each other and affected on the same part of the investment cycel but the reason do not explaine the proposition. The Product Roadmap is also a documents that provides a layout of a product release.
Reference: MDRE 13.6
Learning objective: 1.1.1 , 1.1.5
Main responsible: Julia Mauritsson

Question 6.

Proposition: Agile requirements engineering offers ways of working closer to the customer during the development of the requirements. According to the empirical survey done by Ramesh and Cao this is usually worse than traditional requirements engineering.
Reason: According to the survey the change requests were multiplied and required much more attention than before, changes was more difficult to incorporate due to more people involved.
Correct answer: E
Motivation: Change request were not multiplied, they were rather reduced and most of them only contained grammatical changes. Changes was easy to incorporate since test driven development was used and thus changes could be implemented easy.
Reference: http://www.ecs.csun.edu/~rlingard/COMP682/AgileREPractices.pdf
Learning objective: 1.1.5
Main responsible: Robin Ljungström