IREB Examination

Certified Professional for Requirements Engineering

Requirements Management

- Practitioner -

Practice Exam

Questionnaire:	Set_Public
Release date:	April 5, 2024
Syllabus:	Requirements Management 2.1

☐ Passed ☐ Failed Total number of points

Explanation of the practice exam

This practice exam provides an example of an actual CPRE Requirements Management – Practitioner – exam. It can be used when preparing for the actual exam.

If you want to use this practice exam under realistic conditions, print out the exam and answer the questions without means such as training materials or books within a limit of 50 minutes. Make sure that you encounter as little disturbance as possible when answering the questions.

In order to pass this exam, just like in an actual examination, a mark of 70.00 percent must be achieved. This is 31.50 points out of a maximum 45 possible points for the practice exam at hand.

Evaluation of the results

In the document "Answers to the practice exam EN", you will find the correct answers. To determine the number of points you have achieved, please use the Excel sheet "CorrectionAidForThePracticeExam EN".

Terms of use

1. What is requirements management?

1. Which two activities of requirements management best answer the question "Which requirement generates too high costs with too little benefit?"? (2 answers)

A3P0104
1 point

☐	A) Assignment of attributes
☐	B) Traceability
☐	C) Evaluation and prioritization
☐	D) Versioning
☐	E) Management of the processes

2. Which two of the following questions can best be answered by the versioning of requirements? (2 answers)

A3P0105
1 point

☐	A) Which requirements are part of the system?
☐	B) Which requirements are urgent and important?
☐	C) Which version of the requirement was implemented in my system?
☐	D) Which requirements come from which source?
☐	E) Who was the last person to change the requirement?

2. Requirements information model

3. Which level of abstraction is sufficient for detailing requirements? Select the most suitable criterion. (1 answer)

A3A0204
1 point

☐	A) The residual risk resulting from the remaining degree of freedom is acceptable for all stakeholders.
☐	B) The requirements answer all the questions of the downstream development steps.
☐	C) All stakeholders are aware of the remaining degree of freedom in the specification.
☐	D) At least one solution-based requirement is described for each goal.

4. Which of the following content should be part of a requirements management plan? For each content, indicate whether it should be included in the requirements management plan or not.

A3K0205
2 points

Included	Not included	
☐	☐	A) Definition of the tool to be used to manage requirements variants
☐	☐	B) Definition of the specific criteria for prioritizing requirements for selection of the relevant requirements for release 3.2
☐	☐	C) Definition of the levels of detail at which the requirements specification should be created
☐	☐	D) Definition of the forms of presentation to be used for the requirement types used

3. Assigning attributes and views for requirements

5. With the attribution of requirements, some objectives are linked to the structured documentation of requirements. Which of the following statements is most **incorrect**? (1 answer)

A3A0307
1 point

☐	A) The assignment of attributes to requirements can be used to check the completeness of the documentation.
☐	B) The assignment of attributes to requirements makes it easier for employees to become familiar with requirements engineering.
☐	C) The assignment of attributes to requirements is a prerequisite for release management.
☐	D) The assignment of attributes to requirements allows you to identify the author of a requirement.

6. For the successful use of the attribution of requirements, it is necessary to be clear at the beginning of a requirements engineering process with which goal the respective attributes are to be used.

Indicate true or false for each of the following statements.

A3K0308
2 points

True	False	
☐	☐	A) Defining the goal reduces the risk of any subsequent adjustment to the attribute schema.
☐	☐	B) Defining the goal makes the direct benefit clear for the requirements engineer.
☐	☐	C) Defining the goal increases the probability that the respective attribute will be filled out.
☐	☐	D) Defining the goal makes it easier to differentiate between significant and insignificant attributes when defining an attribute schema.

7. Indicate true or false for the following statements about the definition of an attribute schema. A3K0309
2 points

True	False	
☐	☐	A) The process for defining an attribute schema contains many activities that are also executed in a requirements engineering process.
☐	☐	B) Attributes should be selected such that the person who sets the specific attribute value for a requirement also achieves a direct benefit from the attribute.
☐	☐	C) There are attributes for which the value set should not be extended as part of a requirements engineering process.
☐	☐	D) The specification of declaring an attribute as a mandatory field in a company-wide reference attribute schema supports the monitoring of requirements engineering processes in the company.

8. During the course of a project, it may be necessary to delete the attribute value of a specific attribute. Indicate true or false for the following statements. A3K0310
2 points

True	False	
☐	☐	A) Deleting an attribute value does not cause any problems because the use of a tool ensures that the requirements documentation remains consistent.
☐	☐	B) Before deleting the attribute value, you must analyze whether reports use the value.
☐	☐	C) Deleting an attribute value does not cause any problems because a tool will automatically set the value "NULL" for the attribute in the respective requirements.
☐	☐	D) The deletion of an attribute value during the requirements engineering process must be communicated to all parties affected.

9. To get an initial overview of the requirements situation, you check the current assignment of attributes to the requirements. During this review, you notice the following (see the table excerpt) with regard to the use of the attributes.

A3K0311
2 points

Req. ID	Requirement	Stability	Importance	Priority	Responsible
KD-008	The press may only become active if the activation buttons are pressed within 2 seconds.	Stable	High	A	Miller
SC-009	The activation buttons must be debounced.	FIXED	High	B	Miller
SC-010	The activation buttons must have a stainless steel surface.	Being clarified	High	A	
SEC-011	The activation counter must be secured to prevent manipulation.	Stable	High	B	Jones

Indicate true or false for the following statements.

True	False	
☐	☐	A) The attribute "Req. ID" must not have different alphanumeric prefixes ("KD", "SC", "SEC").
☐	☐	B) For the attribute "stability" there seems to be no defined value range, so that the data is almost worthless.
☐	☐	C) The attribute "Responsible" is a mandatory field.
☐	☐	D) One of the attributes "Importance" or "Priority" is unnecessary and should be removed, as they both contain the same information.

4. Evaluation and prioritization of requirements

10. Which of the following statements is the most important reason for applying analytical prioritization techniques instead of ad-hoc prioritization techniques? (1 answer)

A3A0405
1 point

☐	A) The weighting of the prioritization criteria is very different.
☐	B) The prioritization involves a lot of stakeholders.
☐	C) The requirements to be prioritized are very critical.
☐	D) A requirements management tool can support the calculation of the priority.

5. Version and change management

11. Which two main activities make up the version control for requirements and requirements documents? (2 answers)

A3P0503
1 point

☐	A) Selection of a versioning tool
☐	B) Definition of an identification schema for versions
☐	C) Identification of the file versions used
☐	D) Identification of the versions of individual requirements
☐	E) Identification of baselines

6. Requirements traceability

12. Which of the following definitions is the best description of "pre-requirements specification"? (1 answer)

A3A0609
1 point

☐	A) Traceability of requirements to upstream goals and visions
☐	B) Traceability between different requirements
☐	C) Traceability of development artifacts to their requirements
☐	D) Traceability of requirements to their origin

13. You are the requirements engineer in a project in which a wide variety of tools is used to document development artifacts. Business processes are documented in ARIS, technical requirements are documented in Word, IT requirements are documented in Excel, activity diagrams are documented in Rational Rose, and test cases are documented in Quality Center. Which two forms of presentation for traceability relationships would you most recommend to reflect traceability between these artifacts which are documented in different tools? (2 answers)

A3P0610
1 point

☐	A) Textual references
☐	B) Traceability matrices
☐	C) Traceability graphs
☐	D) Hyperlinks
☐	E) Traceability tables

14. Indicate true or false for the following statements about the application of traceability relationships. A3K0611
2 points

True	False	
☐	☐	A) Traceability relationships of the class "Content" are used to trace which requirements contradict each other in terms of content.
☐	☐	B) Traceability relationships of the class "Documentation" are used to trace which justifications have led to a requirement.
☐	☐	C) Traceability relationships of the class "Conditions" are used to trace which refinements a requirements artifact has gone through.
☐	☐	D) Traceability relationships of the class "Evolution" are used to trace which requirement has been used to replace another requirement.

7. Variant management for requirements

15. Note the following excerpt from a requirements specification with the statements it contains on product variability. A3K0708

2 points

ID	Requirement	Product	Market
R42	The system should accept payments by credit card.	Easy-Book Easy-CD	USA Europe
R43	The system should accept payments via PayPal.	Easy-Book	USA
R44	The system should accept payments via immediate transfer.	Easy-CD	USA Europe

Evaluate this form of presentation by indicating, for the following statements, whether they are true or false.

True	False	
☐	☐	A) The requirements for a product can be changed without affecting other products.
☐	☐	B) When a new product is added, all requirements must be reevaluated.
☐	☐	C) The requirements for different products can be compared with one another.
☐	☐	D) The attributes "Market" and "Product" can be used to uniquely identify the products in which the respective requirement is valid in the respective market.

16. Again, note the following excerpt from a requirements specification. A3A0709

2 points

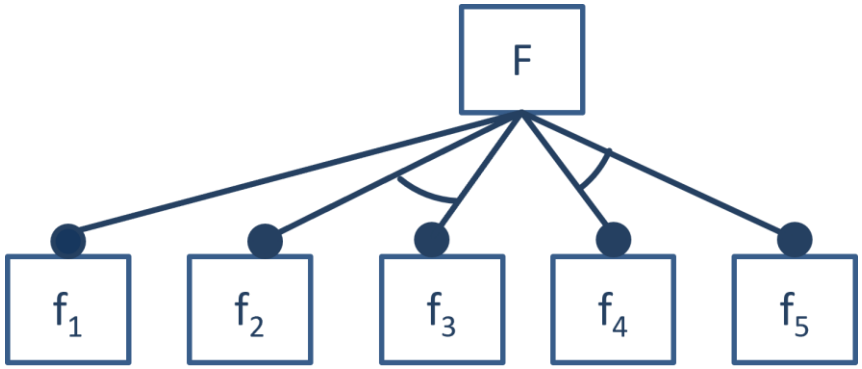
ID	Requirement	Product	Market
R42	The system should accept payments by credit card.	Easy-Book Easy-CD	USA Europe
R43	The system should accept payments via PayPal.	Easy-Book	USA
R44	The system should accept payments via immediate transfer.	Easy-CD	USA Europe

Payment by credit card should now no longer be possible for Easy-CD in Europe, but it should still be possible in the USA. What effect does this have on the requirements specification? (1 answer)

☐	A) No change necessary
☐	B) Duplication of requirement R42 to make two requirements, R42 and R42a, with a change in the attribute "Market"
☐	C) Duplication of requirement R42 to make two requirements, R42 and R42a, with a change in the attribute "Product"
☐	D) Duplication of requirement R42 to make two requirements, R42 and R42a, with a change in the attributes "Product" and "Market"

17. Note the following feature model. A3P0710

2 points



Which two valid configurations can be built according to the feature model? (2 answers)

☐	A) {F; f1; f2; f4}
☐	B) {F; f2; f3; f4}
☐	C) {F; f1; f2; f3; f5}
☐	D) {F; f2; f5}
☐	E) {F; f1; f3; f5}

18. Note the following two feature models. A3A0711

2 points

Which statements about the feature models are correct? (1 answer)

☐	A) M1 enables more valid product configurations than M2.
☐	B) M1 and M2 both describe the same valid product configurations.
☐	C) M1 enables fewer valid product configurations than M2.
☐	D) M1 and M2 enable an identical number of but different product configurations.

19. Note the following excerpt from a requirements document. A3P0712

2 points

ID	Requirement
R52	The cover of the printing press must be made from plastic or stainless steel.
R53	The type of plastic used must be embossed in a cover made from plastic.
R54	Permitted stainless steels are V2A or V4A.
R55	The surface of a cover made from stainless steel must be anodized.

Which two variants can be identified in the requirement text? (2 answers)

☐	A) Cover
☐	B) Printing press
☐	C) Plastic
☐	D) Stainless steel
☐	E) Surface

20. There are different forms of representation for modeling variability. Different descriptions and forms of presentation are given below. Assess which statement is true or false based on the three descriptions.

A3K0713
2 points

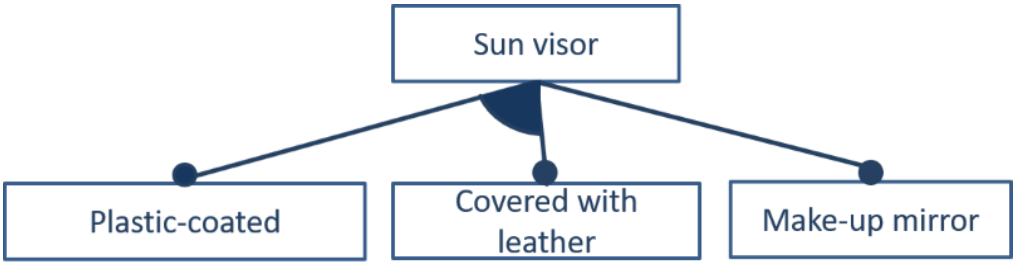
Description 1

ID	Requirement
R32	The A-Class sun visor should be plastic-coated.
R33	The E-Class sun visor should be covered with leather.
R34	The sun visor in all products should contain an illuminated make-up mirror.

Description 2

ID	Requirement	A-Class	E-Class
R32	The sun visor should be plastic-coated.	X	
R33	The sun visor should be covered with leather.		X
R34	The sun visor should contain an illuminated make-up mirror.	X	X

Description 3



True	False	
☐	☐	A) Description 1 is a textual, implicit assignment of requirements to specific products.
☐	☐	B) Description 2 is an explicit assignment of requirements to specific products.
☐	☐	C) From a content perspective, description 2 states the same as description 1.
☐	☐	D) From a content perspective, description 3 states the same as description 1.

8. Reporting in requirements management

21. Which of the following statements about reporting in requirements management is most applicable? (1 answer)

A3A0804
1 point

☐	A) The development of special key figures to justify decisions
☐	B) The collection and presentation of information as an integral part of fixed tender documents
☐	C) The collection, evaluation, and presentation of information as the basis for decisions
☐	D) The recording of articles for the requirements engineering magazine

22. Complete the following statement: "Goal, question, metric is a method for ..." (1 answer)

A3A0805
1 point

☐	A) ... identifying as many questions as possible in a short time
☐	B) ... defining goal-oriented key figures using a non-systematic procedure
☐	C) ... ensuring that relevant key figures are used in reports
☐	D) ... creating a key figure that defines a goal for each question

23. In the middle of a project, a degree of completion of 45% is determined. This is 5% less than planned. Evaluate all the statements listed as "True" or "False". A3K0806 2 points

True	False	
☐	☐	A) The project goal can still be reached at the planned project completion.
☐	☐	B) If the degree of completion continues to develop in the same way over the course of the project, the degree of completion at the planned project end date will be a maximum of 90%.
☐	☐	C) The project end date must be defined according to the following formula: New_end_date = start_date + (current_date – start_date)/45 * 100.
☐	☐	D) The additional costs of €20,000 determined in the middle of the project means at least €40,000 of additional costs for the project at the planned project end if the project continues to develop in the same way.

9. Managing Requirements Engineering processes

24. Which two of the following statements are most applicable to lightweight requirements specifications? (2 answers) A3P0909 1 point

☐	A) Lightweight requirements are only specified in detail when their implementation is about to begin.
☐	B) Lightweight requirements are generally not specified in detail.
☐	C) The details of the implementation are discussed verbally, often without being documented.
☐	D) Lightweight specifications exist only in iterative development.
☐	E) Upfront specifications do not exist in agile development.

25. Indicate true or false for the following statements on upfront requirements specifications. A3K0910 2 points

True	False	
☐	☐	A) Upfront requirements specifications make sense if the requirements for the entire project can be designed such that they are stable and few surprises are expected.
☐	☐	B) Upfront requirements specifications are useful for projects with a fixed price.
☐	☐	C) In a volatile environment, upfront requirements specifications can prevent requirements changing.
☐	☐	D) Upfront requirements specifications are required in particular for innovative projects.

26. Which two of the following statements regarding handling changes to requirements are most applicable? (2 answers)

A3P0911
1 point

☐	A) In a project with a fixed price, subsequent changes to the project scope are not possible.
☐	B) In a project with a fixed price, subsequent changes to the project scope are only possible via change requests.
☐	C) In agile development, requirements changes are equivalent to the other requirements in the product backlog which are not yet been implemented.
☐	D) Change requests are not possible in agile development.
☐	E) The product backlog must not contain any changes.

27. Which of the following statements is most applicable with regard to controlling the requirements engineering process? (1 answer)

A3A0912
1 point

☐	A) There must be no deviation from the planned requirements engineering process.
☐	B) In the event that the requirements engineering process deviates from the plan, the plan is adapted to the progress.
☐	C) In order to detect deviations of the requirements engineering process from the plan at an early stage, this process must be monitored.
☐	D) In a project with a fixed price, changes to the plan after the contract has been agreed are not possible.

28. When testing the prototype, the end users discover a lot of errors in the software that can be traced back to errors in the requirements specification. Which two of the following measures are you most likely to take? (2 answers)

A3P0913
1 point

☐	A) We change over to agile development so that errors in the requirements are detected earlier.
☐	B) We review the requirements and verify the quality of the requirements.
☐	C) The requirements engineering process is improved using CMMI.
☐	D) We plan a process improvement for the requirements engineering process using the template according to Wiegers.
☐	E) A cause analysis is performed to investigate how precisely these errors have occurred. Suitable improvements to the requirements engineering process are then sought.

10. Requirements management in agile projects

29. Which statements about agile approaches are true and which are false? A3K1003
2 points

True	False	
☐	☐	A) Agile approaches are a homogeneous group of development approaches.
☐	☐	B) User stories must be used in agile approaches.
☐	☐	C) There are no mandatory specifications of which artifacts are to be used.
☐	☐	D) Use cases can be used as artifacts.

30. Which two of the following user stories are structurally correct? The example is based on a webshop. (2 answers) A3P1004
1 point

☐	A) As a user, I want to fill a basket so that I can purchase multiple products.
☐	B) To purchase multiple products, I want to be able to fill a basket.
☐	C) I want to fill a basket to purchase multiple products.
☐	D) To purchase multiple products, as a user I want to be able to fill a basket.
☐	E) As a user, I want to fill a basket.