

IREB Examination

Requirements Engineering Advanced Level

Elicitation and Consolidation

Practice Examination

Questionnaire:	Set_EN_2013_Public_1.2
Syllabus:	Version 1.0

☐ Passed

☐ Failed

Total number of points

Explanation of the example examination:

The practice examination at hand serves the purpose of illustrating an actual IREB Requirements Engineering Advanced Level *Elicitation & Consolidation* exam. Moreover, it can be used during preparation for simulating an actual exam situation.

This example examination resembles an actual exam in terms of form, structure and style. The basic difference is that the exam at hand only comprises 24 questions while an actual exam comprises approximately 45 questions. Therefore, if you want to simulate a realistic examination situation, you should complete the exam at hand within 40 minutes. A real examination with approximately 45 questions takes 75 minutes. For more information on the examination refer to the document “Examination Regulations for the CPRE-Examination Certified Professional for Requirements Engineering – Advanced Level –” at <http://www.ireb.org>.

If you want to practice an examination under realistic conditions, print out the practice examination at hand and answer the questions as in a closed book exam (without means like training materials or books) within 40 minutes. Make sure that you encounter as little disturbance as possible during this time.

In order to pass this exam, as in an actual examination, minimum 70.00 percent of the possible number of points have to be achieved, which is minimum 29.40 out of 42 possible points of the practice examination at hand.

Evaluation of the results:

In the document “Answers to the practice examination” you will find the correct answers. To determine the number of points you have achieved, you have to apply the rules for the evaluation of the answers stated in the document “Certified Professional for Requirements Engineering (CPRE) Foundation Level – Examination Guideline”, section “Three types of questions” (available at <http://www.ireb.org>).

Use the spreadsheet „Correction aid for the practice examination“ (xls) to record your answers and it will automatically display your total number of points as well as the information whether you passed the exam.

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1. Skills of the requirements engineer in the field of elicitation and consolidation

1. During an interview for requirements elicitation a stakeholder makes to you the following statement: “I actually thought that as requirements engineer it is your job to create these requirements”. A1K0105
2 Points

Evaluate the following interpretations of this statement according to the Schulz von Thun communication model; please indicate for each if it is true or false.

True	False	
<input type="checkbox"/>	<input type="checkbox"/>	A) On the factual level the stakeholder would maybe like to convey to you that the creation of requirements is your job.
<input type="checkbox"/>	<input type="checkbox"/>	B) On the relationship level the stakeholder would maybe like to convey to you that he has full trust in your abilities as requirements engineer.
<input type="checkbox"/>	<input type="checkbox"/>	C) On the self-disclosure level the stakeholder would maybe like to convey to you that he does not trust himself to create requirements.
<input type="checkbox"/>	<input type="checkbox"/>	D) On the appeal level the stakeholder would maybe like to convey to you that he is requesting you to create the requirements.

2. Which of the following skills of a requirements engineer is, with regard to the requirements elicitation and consolidation, not of primary importance? (1 Answer) A1A0106
1 Point

<input type="checkbox"/>	A) Motivating nature
<input type="checkbox"/>	B) Reflective communication
<input type="checkbox"/>	C) Leadership
<input type="checkbox"/>	D) Neutrality
<input type="checkbox"/>	E) Negotiation

3. In a workshop you are analysing a conflict between two heatedly arguing stakeholders. Which statements concerning the application of the Schulz von Thun communication model for conflict analysis are true, and which are false? A1K0107
2 Points

True	False	
<input type="checkbox"/>	<input type="checkbox"/>	A) If a stakeholder reacts increasingly to the factual content of messages, then a data conflict could be present.
<input type="checkbox"/>	<input type="checkbox"/>	B) If a stakeholder reacts increasingly to the self-disclosure content of messages, then a value conflict could be present.
<input type="checkbox"/>	<input type="checkbox"/>	C) If a stakeholder reacts increasingly to the relationship content of messages, then a structural conflict could be present.
<input type="checkbox"/>	<input type="checkbox"/>	D) If a stakeholder reacts increasingly to the relationship content of messages, then a conflict of interests could be present.
<input type="checkbox"/>	<input type="checkbox"/>	E) If a stakeholder reacts increasingly to the appeal content of messages, then a conflict of interest could be present.

2. Requirements sources

4. According to project conditions different information is maintained within a stakeholder list. Which of the following information items are not relevant for every project and must not therefore be documented in every project? (1 Answer) A1A0210
1 Point

<input type="checkbox"/>	A) Field and depth of knowledge
<input type="checkbox"/>	B) Time and location availability
<input type="checkbox"/>	C) Public relevance
<input type="checkbox"/>	D) Goals and interests in relation to the project

5. According to the Alexander's onion layer model, which two of the following stakeholder groups can be classified as stakeholders from the wider context? (2 Answers) A1P0211
2 Points

<input type="checkbox"/>	A) Developers of the system
<input type="checkbox"/>	B) Project owner
<input type="checkbox"/>	C) Future maintenance personnel
<input type="checkbox"/>	D) Trade unions

6. Which of the following methods supports user-centred Requirements Engineering especially well? (1 Answer) A1A0212
1 Point

<input type="checkbox"/>	A) User Stories
<input type="checkbox"/>	B) Usability Engineering
<input type="checkbox"/>	C) Elevator Pitch
<input type="checkbox"/>	D) Interviews

7. Decide whether the following statements regarding Personas are true or false. A1K0213
2 Points

True	False	
<input type="checkbox"/>	<input type="checkbox"/>	A) Personas should be based on real, empirically collected data.
<input type="checkbox"/>	<input type="checkbox"/>	B) Secondary Personas are examples of user groups for which the system should explicitly not be developed.
<input type="checkbox"/>	<input type="checkbox"/>	C) A Persona description should not contain any fictitious data.
<input type="checkbox"/>	<input type="checkbox"/>	D) Personas are used as the starting point for carrying out a contextual inquiry.

8. You are assigned the task of user analysis for a system to be specified. Which method do you, as requirements engineer, consider to be appropriate? (2 Answers) A1P0214
2 Points

<input type="checkbox"/>	A) In order to find new user groups you invite important stakeholders, such as the project owner and the product manager, to a common brainstorming.
<input type="checkbox"/>	B) You send out a questionnaire to ask potential users about their goals and needs and from the results you create user groups.
<input type="checkbox"/>	C) On the basis of the gathered goals and needs of the users you create user groups and determine the primary user group.
<input type="checkbox"/>	D) In order to investigate the needs of the newly identified user groups you ask important stakeholders, such as the project owner and the product manager.

9. Which statements concerning user participation are true and which are false?

A1K0215

2 Points

True
False

<input type="checkbox"/>	<input type="checkbox"/>	A) The moderator must ensure that participants' comments are restricted to objective input.
<input type="checkbox"/>	<input type="checkbox"/>	B) In all cases the decision-making process and decision rules that apply during the intervention must be communicated.
<input type="checkbox"/>	<input type="checkbox"/>	C) Open space, World Cafe, Brainstorming and Fish Bowl are typical methods for user participation in group workshops.
<input type="checkbox"/>	<input type="checkbox"/>	D) The experience of the requirements engineer has a large influence on the success of the participation method.
<input type="checkbox"/>	<input type="checkbox"/>	E) The participants must be kept up to date with regard to the state of work and possibilities for participation during the entire intervention.

3. Elicitation techniques

10. You and your project team have been assigned to elicit the requirements for a new system to be developed. After a detailed analysis of the project constraints you have decided to carry out the requirements elicitation by means of a number of interviews, which you and one more of your colleagues will carry out. During the first two interviews you notice that your colleague is asking suggestive questions. Which of the following questions are suggestive questions, and which are not? A1K0325
3 Points

Suggestive	Not suggestive	
<input type="checkbox"/>	<input type="checkbox"/>	A) The input data should be saved once the data entry form has been confirmed, shouldn't it?
<input type="checkbox"/>	<input type="checkbox"/>	B) According to Mr. Maier all personal data will be saved persistently on the server. Do you agree?
<input type="checkbox"/>	<input type="checkbox"/>	C) Which internet browsers are completely out of the question for you?
<input type="checkbox"/>	<input type="checkbox"/>	D) Don't you also think that the documents' status should be shown to the administrators?

11. Below four possible project goals are named. Evaluate which of the following goals is a soft goal. (1 Answer) A1A0326
2 Points

<input type="checkbox"/>	A) Our new software must be accepted by the users.
<input type="checkbox"/>	B) Our new product must be lower priced than the comparable product from the competitor "Everyman Software".
<input type="checkbox"/>	C) We must win a larger market share with our new product.
<input type="checkbox"/>	D) The introduction of the new workflow software must increase the efficiency of the administrative staff by 10%.

12. An elicitation technique was classified by one of your project colleagues on the basis of its characteristics as follows: **A1A0327**
2 Points

The technique may be classified as a neutral technique with respect to the direction of activity, as an analytical technique with respect to the nature of the activity and as a reality-based technique with respect to the frame of reference of the activity.

To which of the following elicitation techniques does the given classification fit? (1 Answer)

<input type="checkbox"/>	A) Storyboard
<input type="checkbox"/>	B) Method 635
<input type="checkbox"/>	C) Field observation
<input type="checkbox"/>	D) Contextual Inquiry
<input type="checkbox"/>	E) Questionnaire

13. Which two of the following statements are advantages of the elicitation technique "system archaeology"? (2 Answers) **A1P0328**
1 Point

<input type="checkbox"/>	A) Using system archaeology it is possible to ensure that none of the requirements from the predecessor system get lost.
<input type="checkbox"/>	B) By making extensive use of system archaeology time can be saved during requirements consolidation.
<input type="checkbox"/>	C) As many of the requirements of the legacy system will be inherited, the level of acceptance by the later users of the new system will be increased.
<input type="checkbox"/>	D) By means of system archaeology many detailed requirements can be obtained without the direct involvement of stakeholders.

14. An elicitation technique was classified by one of your project colleagues on the basis of its characteristics as follows: **A1A0329**
2 Points

The technique may be classified as a questioning technique with respect to the direction of activity, as an individual-orientated technique with respect to the activity partner, as an analytical technique with respect to the nature of the activity and as a neutral technique with respect to the frame of reference of the activity.

To which of the following elicitation techniques does the given classification fit? (1 Answer)

<input type="checkbox"/>	A) Questionnaire
<input type="checkbox"/>	B) Contextual Inquiry
<input type="checkbox"/>	C) Prototyping
<input type="checkbox"/>	D) Interview

15. In order to collect basic factors for a system to be developed, you would like to apply perspective-based reading. Which two types of document are most suitable for this? (2 Answers) **A1P0330**
1 Point

<input type="checkbox"/>	A) Specification of the legacy system
<input type="checkbox"/>	B) Strategy paper for the system to be developed
<input type="checkbox"/>	C) User handbook of the legacy system
<input type="checkbox"/>	D) Advertising brochure for the system to be developed

16. What do the following techniques have in common?

A1P0332

1. Perspective-based reading

2 Points

2. Apprenticing

3. Contextual inquiry

4. System archaeology

(2 Answers)

<input type="checkbox"/>	A) Base factors are collected.
<input type="checkbox"/>	B) They are all moderated techniques.
<input type="checkbox"/>	C) They are all group-orientated techniques.
<input type="checkbox"/>	D) The techniques are applicable when stakeholders show little motivation.
<input type="checkbox"/>	E) The techniques are suitable for the identification of stakeholders.

17. Which of the following interview types can be distinguished?

A1P0333

(2 Answers)

2 Points

<input type="checkbox"/>	A) Thun-standardized
<input type="checkbox"/>	B) Non-standardized
<input type="checkbox"/>	C) Pseudo-standardized
<input type="checkbox"/>	D) Half-standardized
<input type="checkbox"/>	E) Fully standardized

18. Which statements about elicitation techniques are true and which are false?

A1K0334
1 Point

True	False	
<input type="checkbox"/>	<input type="checkbox"/>	A) Brainstorming, storyboard and Edward de Bono's 6 thinking hats are creativity techniques.
<input type="checkbox"/>	<input type="checkbox"/>	B) Apprenticing and contextual inquiry are observation techniques..
<input type="checkbox"/>	<input type="checkbox"/>	C) Questionnaires, interviews and the Osborne checklist are questioning techniques.
<input type="checkbox"/>	<input type="checkbox"/>	D) Reuse and system archaeology are artefact-based techniques

19. Which statements about questionnaires are true and which are false

A1K0335
2 Points

True	False	
<input type="checkbox"/>	<input type="checkbox"/>	A) When creating a questionnaire a distinction is made between the phases research design and questionnaire construction.
<input type="checkbox"/>	<input type="checkbox"/>	B) The use of closed questions increases the effort during the evaluation of the questionnaire.
<input type="checkbox"/>	<input type="checkbox"/>	C) It must already be clear before the actual questioning which hypothesis should be answered.
<input type="checkbox"/>	<input type="checkbox"/>	D) It is reasonable to use a questionnaire if you would like to give stakeholders with poor communication skills more time to answer the questions.
<input type="checkbox"/>	<input type="checkbox"/>	E) Basically both open and closed questions can be freely combined.

20. Which statement about apprenticing is false?**A1A0336****(1 Answer)****1 Point**

<input type="checkbox"/>	A) The stakeholder can mention requirements during the apprenticing.
<input type="checkbox"/>	B) Apprenticing is an observation technique.
<input type="checkbox"/>	C) Apprenticing is an individual-orientated technique.
<input type="checkbox"/>	D) Apprenticing should, if possible, take place in the environment in which the new system will later be deployed.
<input type="checkbox"/>	E) Further questions are not allowed during apprenticing, as these may influence the observation.

4. Consolidation techniques

21. Given the following scenario:

A1A0408

In your current project a conflict has broken out between two departments concerning the exact implementation of a functionality. The functionality being discussed represents one of the most important use cases of the system to be developed and, according to the project management, a long lasting acceptance of the system depends to a large degree on the implementation of this use case. The two conflicting parties are composed of a very large number of stakeholders, who in addition are located physically far apart. Furthermore you notice that the group dynamic between the two departments is becoming more and more problematic as the conflict goes on. After an extensive analysis of the conflicting parties' viewpoints and after a number of individual conversations with the "ringleaders", you and your colleagues come to the conclusion that the conflict is superficially a data conflict behind which, however, lies a deeper value conflict.

2 Points

Which consolidation technique is best suited to solve this conflict?

(1 Answer)

<input type="checkbox"/>	A) Agreement
<input type="checkbox"/>	B) Compromise
<input type="checkbox"/>	C) Voting
<input type="checkbox"/>	D) Definition of variants
<input type="checkbox"/>	E) Overruling

22. Given the following scenario:

A1A0409

In your current project a conflict has broken out between two stakeholders concerning the exact implementation of a functionality. The functionality under discussion represents the most critical system function, as an incorrect behavior of the system could, under certain circumstances, give rise to a claim for damages with high costs and a serious loss of image.

2 Points

When you discuss this conflict with the project management, they convey to you that it is indispensable for the success of the project that a clear solution is found, and that this solution will be accepted by both parties in the long term. To the project management's enquiries concerning the tone of the conflicting parties' discussion you answer that in spite of the widely diverging opinions they are maintaining a professional approach with each other. After an extensive analysis of the conflicting parties' viewpoints and brief, individual conversations with the people concerned, you and your colleagues come to the conclusion that the conflict is purely a data conflict, and that for both sides it is really only a question of finding the optimal solution.

Which consolidation technique is best suited to solving this conflict?

(1 Answer)

<input type="checkbox"/>	A) Agreement
<input type="checkbox"/>	B) Compromise
<input type="checkbox"/>	C) Voting
<input type="checkbox"/>	D) Definition of variants
<input type="checkbox"/>	E) Overruling

23. You are carrying out the analytical conflict resolution technique “weighted PMI”. Your stakeholders have already identified and voted on weightings (CAF) for the decision factors (E1-E5). The alternatives (A1-A3) were already evaluated by experts according to the PMI method. The following matrix is now provided:

A1K0410

3 Points

		Alternatives		
Influencing factors	CAF	A1	A2	A3
E1	2	+	+	+
E2	2	-	+	-
E3	3	-	-	+
E4	4	+	+	-
E5	2	-	-	I

Which statements about the matrix are true and which are false?

True
False

<input type="checkbox"/>	<input type="checkbox"/>	A) For the given alternatives the influencing factor E1 can be ignored.
<input type="checkbox"/>	<input type="checkbox"/>	B) The alternative A1 is superior to A2.
<input type="checkbox"/>	<input type="checkbox"/>	C) A3 is definitely the worst alternative.
<input type="checkbox"/>	<input type="checkbox"/>	D) No decision can be taken as the “I” for the influencing factor E5 and the alternative A3 is unresolved.
<input type="checkbox"/>	<input type="checkbox"/>	E) A2 is definitely the best alternative.

24. In a discussion with a number of stakeholders you discover a conflict between two stakeholders. On further analysis it turns out that the technical content is very complicated and cannot be understood by all stakeholders. Which of the following conflict resolution techniques do you choose? (1 Answer)

A1A0411

1 Point

<input type="checkbox"/>	A) Agreement
<input type="checkbox"/>	B) Compromise
<input type="checkbox"/>	C) Definition of variants
<input type="checkbox"/>	D) Voting
<input type="checkbox"/>	E) Overruling