

IREB CPRE Sample exam

Unofficial set of sample questions

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Syllabus IREB CPRE	Version 3
Number of questions	46

General Information

This set contains sample questions for the exam for IREB Requirements Engineering Certification Basic Level. The official set of sample questions can be downloaded from www.ireb.org

The questions contained herein were developed based on the learning objectives provided in the IREB CPRE Basic Level syllabus and the exam question development guidelines.

To simulate actual exam conditions, answer all questions without the use of aids (books, syllabus) in 75 minutes.

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The number and type of exam questions included in this set may be different from the actual exam. You can check the exact exam rules on the IREB website ([section Downloads, Exam regulations](#)).



Sample exam questions

1. Which of the following statements best defines the requirement (1 answer)?

- | | |
|--------------------------|--|
| <input type="checkbox"/> | A. Functionality needed by a system user to solve a problem or achieve a goal. |
| <input type="checkbox"/> | B. A condition or capability that the software must have in order to comply with the provisions of the contract. |
| <input type="checkbox"/> | C. A description of a need that defines an organization's strategy over time. |
| <input type="checkbox"/> | D. A need as perceived by the stakeholder. |

1 – D

2. The primary goal of requirements engineering is to manage requirements for systems. Which statement is the best definition of a system (1 answer)?

- | | |
|--------------------------|--|
| <input type="checkbox"/> | A. A composition of software, hardware, and other elements working together to achieve some goal |
| <input type="checkbox"/> | B. Equipment deployed in the customer's environment |
| <input type="checkbox"/> | C. Business processes subject to optimization |
| <input type="checkbox"/> | D. Software that implements specific stakeholder requirements |

2 – A

3. Which of the statements about requirements are true and which are false?

- | True | False | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | A. Functional requirements describe the behavior of the system |
| <input type="checkbox"/> | <input type="checkbox"/> | B. Quality requirements relate to expectations of the testing process. |
| <input type="checkbox"/> | <input type="checkbox"/> | C. Functional requirements can describe the system's interactions with its environment. |
| <input type="checkbox"/> | <input type="checkbox"/> | D. Constraints are specific types of quality requirements |

3

A - true

B - false

C - true

D - false



4. Which statement about the benefits of robust requirements engineering is true? (1 answer)

- A. Requirements engineering reduces the risk of realizing the wrong product
- B. Requirements engineering reduces the cost of implementing IT projects
- C. Requirements engineering reduces testing effort
- D. Requirements engineering enables understanding and modeling of all interactions and dependencies between product components and the business environment

4 – A

5. You analyze the requirements for the e-store. The initial requirements spoke of the need to integrate with payment systems to enable payments by 8 methods. As you analyze and agree on the requirements, you agree with the stakeholders that only 5 payment methods will be implemented in the first stage of system development. What is most likely to be affected by this decision? (2 answers)

- A. System scope
- B. System boundary
- C. Reliability requirements
- D. System context boundary

5 – A and B

6. What will be part of the system boundary? (1 answer)

- A. Functional requirements of the system
- B. Interfaces to external systems
- C. Users and administrators
- D. Regulations

6 – B

7. What is not one of the basic principles in requirements engineering? (1 answer)

- A. Value orientation
- B. Customer orientation
- C. Problem - requirement - solution
- D. Evolution

7 – B



8. Defining and specifying the correct requirements for any system requires an understanding of the business and technical environment. Which principle of requirements engineering does this statement apply to?

-
- A. Value orientation
-
- B. Stakeholders
-
- C. Problem - requirement - solution
-
- D. Context
-

8 – D

9. Which of the following statements about the value of requirements engineering is true and which is false?

True	False	
<input type="checkbox"/>	<input type="checkbox"/>	A. Requirements engineering activities themselves provide measurable value to the project and stakeholders therefore it is important to have a systematic and formal requirements engineering process in place for the project.
<input type="checkbox"/>	<input type="checkbox"/>	B. Requirements engineering activities and deliverables can be viewed as a cost necessary to develop a solution concept rather than a value in itself.
<input type="checkbox"/>	<input type="checkbox"/>	C. Requirements engineering products, such as requirements, are usually not an end in themselves but a means to an overarching goal.
<input type="checkbox"/>	<input type="checkbox"/>	D. The economic value of requirements engineering is similar in every project, but in agile projects, requirements engineering provides less value than in traditional projects.

9

- A - false
B - true
C - true
D - false

10. Which of the following artifacts (work products), is one of the typical artifacts developed during requirements engineering activities? (1 answer)

-
- A. Meeting notes from board meeting
-
- B. A verbally expressed business need of the customer
-
- C. A drawing showing a preliminary outline of the architecture
-
- D. A requirement specification based on a template
-

10 – D



11. Work products can be represented in various forms. One typical form is: (1 answer)

- | | |
|--------------------------|------------------------|
| <input type="checkbox"/> | A. Standard-based form |
| <input type="checkbox"/> | B. Model-based form |
| <input type="checkbox"/> | C. EARS template |
| <input type="checkbox"/> | D. UML notation |

11 – B

12. One of the characteristics of work products is life span. Which of the statements about the different work products and their types in terms of life span are true and which are false?

True	False	
<input type="checkbox"/>	<input type="checkbox"/>	A. Temporary work products are mainly used to present ideas and communicate. Once they have achieved their purpose, they can be removed.
<input type="checkbox"/>	<input type="checkbox"/>	B. Evolving work products: are used to manage the further development of a system deployed to a production environment.
<input type="checkbox"/>	<input type="checkbox"/>	C. Temporary work products can be transformed into evolving work products.
<input type="checkbox"/>	<input type="checkbox"/>	D. Evolving work products can become a durable work product, for example, when they are made available to a customer and considered a baseline.

12

- A - true
B - false
C - true
D - true

13. Functional requirements focus on various aspects of the system. One such aspect is not: (1 answer)

- | | |
|--------------------------|------------------------|
| <input type="checkbox"/> | A. Structure and data |
| <input type="checkbox"/> | B. Function and flow |
| <input type="checkbox"/> | C. State and behavior |
| <input type="checkbox"/> | D. Action and sequence |

13 – D



14. There are certain rules for creating work products (artifacts). Which of the following statements is not one such rule? (1 answer)

- | | |
|--------------------------|---|
| <input type="checkbox"/> | A. Select the type of artifact in terms of meeting the intended purpose |
| <input type="checkbox"/> | B. Apply the same structure to different artifacts |
| <input type="checkbox"/> | C. Use terms according to their definition in the glossary |
| <input type="checkbox"/> | D. Refer to the content instead of duplicating it |

14 – B

15. Consider an example of a requirement specified using natural language.

ID REQ 00150

Actor: Application user

Component: product database

The system is to allow the user to search for a product using a criterion specified by the system operator

What problem can you see in a requirement phrased in this way? (1 answer)

- | | |
|--------------------------|--|
| <input type="checkbox"/> | A. Too long and convoluted description |
| <input type="checkbox"/> | B. Lack of uniform terminology |
| <input type="checkbox"/> | C. Ambiguous description of conditions |
| <input type="checkbox"/> | D. Incomplete comparison |

15 – B



16. Consider the following requirement specification in the form of a use case

Attribute	Value	Realization method
ID	UC 020	
Title	Generate transaction confirmation	
Actor	Banking application user	
Pre-condition	The actor is logged in	
Launching the function	My Transactions → history → transaction details	
Main scenarios	<ol style="list-style-type: none"> 1. 1 The actor selects the operation of generating a transaction confirmation 2. 2. the system displays a form for selecting the type of confirmation (save as PDF / send by email) 3. 3. the actor selects the "save as PDF" option, indicates the location on the disk and confirms the generation of the transaction confirmation 4. 4. the system saves the transaction confirmation as a PDF file in the location indicated by the actor 	FORM Details_transactions ICO Generate FORM Select_type
Post condition	Confirmation of the transaction is saved as a PDF file in the indicated place on the disk	

Which of the statements relating to the above specification are true, which are false?

True	False	
<input type="checkbox"/>	<input type="checkbox"/>	A. The use case specification lacks information on how to trigger the functionality.
<input type="checkbox"/>	<input type="checkbox"/>	B. The main scenario includes a description of all possible alternative flows.
<input type="checkbox"/>	<input type="checkbox"/>	C. The specification does not include information on alternative flows, which is part of the requirements description in this form.
<input type="checkbox"/>	<input type="checkbox"/>	D. The specification does not contain information about the data structure, which is part of the description of the extension scenarios.

16

A - false

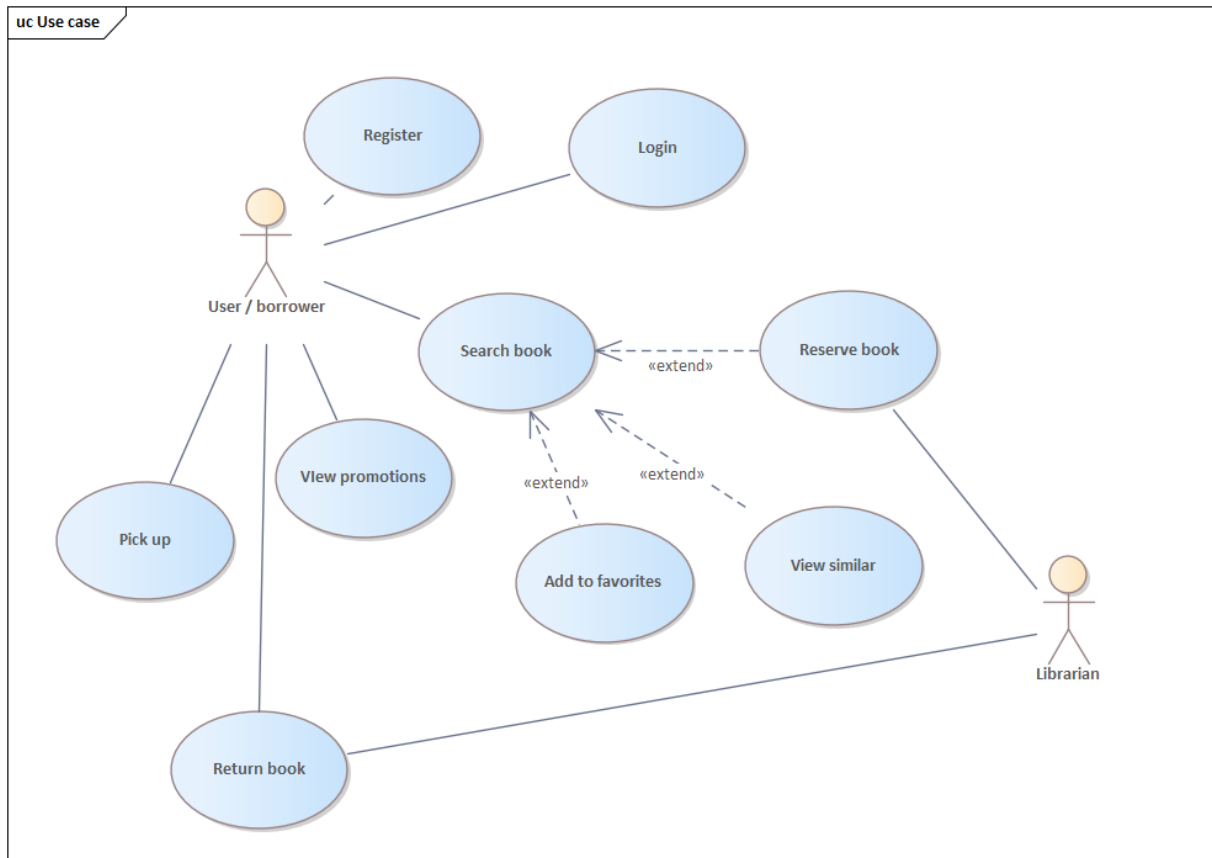
B - false

C - true

D - false



17. The diagram below shows the functional model for a piece of the system supporting the processes in the library.



Which of the following statements about system functionality are modeled in the diagram above?

Modeled	Not modeled / inconsistent with the diagram	
<input type="checkbox"/>	<input type="checkbox"/>	A. The book reservation functionality can be extended by "search for a book".
<input type="checkbox"/>	<input type="checkbox"/>	B. Book search can be extended by reserving a book.
<input type="checkbox"/>	<input type="checkbox"/>	C. Reserving a book must be done by a librarian.
<input type="checkbox"/>	<input type="checkbox"/>	D. Logging in is required to make a reservation.

17

A - not modeled / inconsistent with the diagram

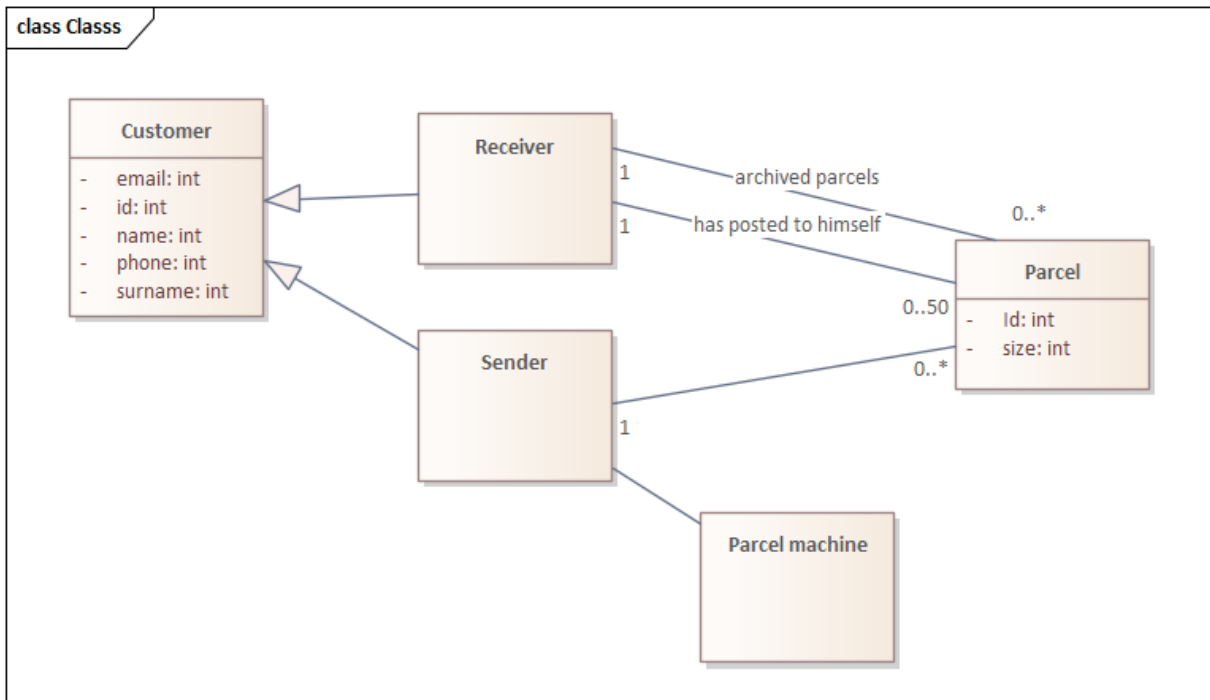
B - modeled

C - not modeled / inconsistent with the diagram

D - not modeled / inconsistent with the diagram



18. The diagram below shows an excerpt from the data model for a system that allows tracking and receiving parcels at a parcel machine (Paczkomat).



Which of the following statements about data relationships are modeled in the diagram above?

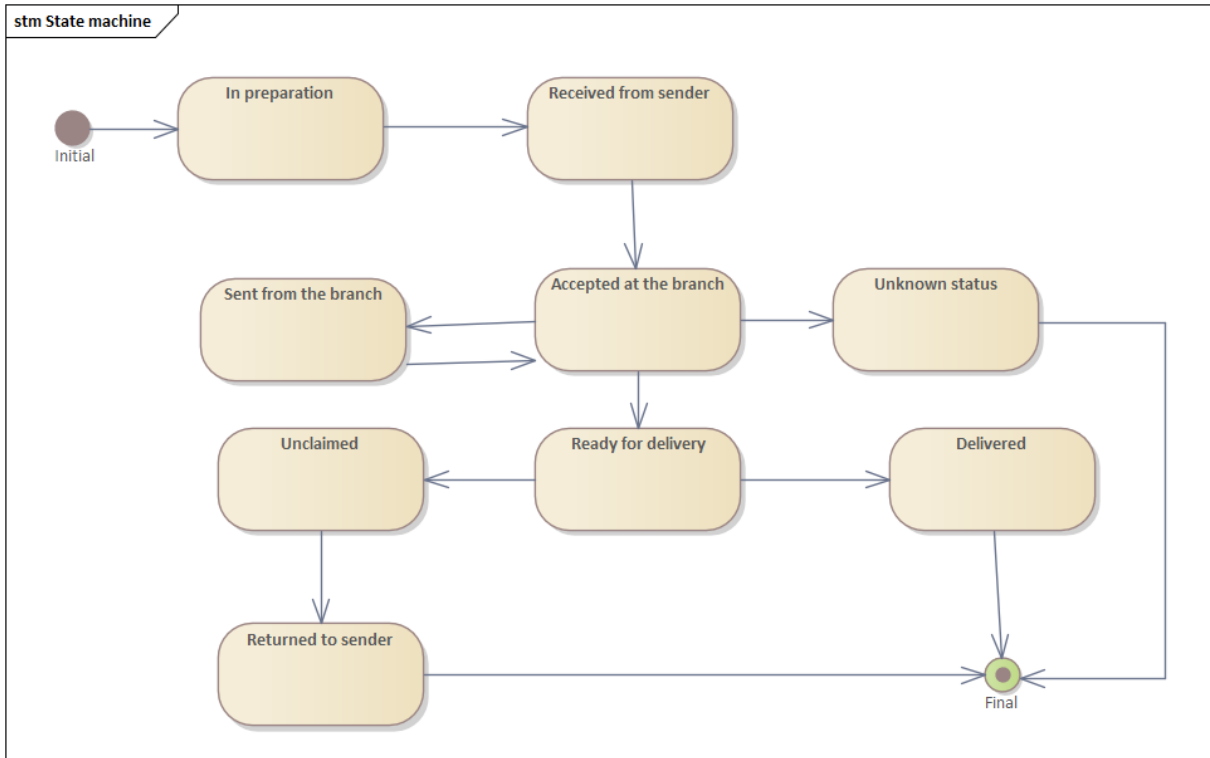
Modeled	Not modeled / inconsistent with the diagram	
<input type="checkbox"/>	<input type="checkbox"/>	A. A recipient can have any number of parcels sent to itself.
<input type="checkbox"/>	<input type="checkbox"/>	B. A recipient can have a maximum of 50 archived parcels.
<input type="checkbox"/>	<input type="checkbox"/>	C. The sender can have any number of parcels sent to him, but he cannot have no parcels sent to him.
<input type="checkbox"/>	<input type="checkbox"/>	D. A sender can only send a parcel at a specific parcel machine.

18

- A - not modeled / inconsistent with the diagram
- B - not modeled / inconsistent with the diagram
- C - not modeled / inconsistent with the diagram
- D - not modeled / inconsistent with the diagram



19. The following diagram shows the statuses of the parcel.



Which of the following statements regarding transitions between states are modeled in the diagram above?

Modeled	Not modeled / inconsistent with the diagram	
<input type="checkbox"/>	<input type="checkbox"/>	A. Unclaimed parcel may be reissued for delivery.
<input type="checkbox"/>	<input type="checkbox"/>	B. A parcel whose status is specified as "status unknown" will be considered lost and will trigger the complaint process.
<input type="checkbox"/>	<input type="checkbox"/>	C. The sender can cancel the parcel as long as it is in "in preparation" status.
<input type="checkbox"/>	<input type="checkbox"/>	D. A parcel in the state of "accepted at the branch" can move to the state of "shipped from the branch".

19

- A - not modeled / inconsistent with the diagram
- B - not modeled / incompatible with the diagram
- C - not modeled / incompatible with the diagram
- D - modeled



20. Models in requirements engineering can have various applications. What would be an example of using models to decompose a complex reality? (1 answer)

- A. Representing the overall functionality of the system using a high-level use case diagram, and then detailing the individual use cases with diagrams showing a more detailed description of the actor's interaction with the system.
- B. Specifying data requirements in the form of a class diagram, with the goal of accurately representing the data structure and data relationships in the form of a visual model built according to UML principles.
- C. Creating a process flow diagram to organize information about activities and roles, documented using natural language.
- D. Develop an activity diagram for a specific flow to evaluate the completeness of the requirements specification, assess testability, and design test cases for user acceptance testing.

20 – A

21. Which of the following UML language elements is a typical activity diagram element? (2 answers)

- A. Object
- B. Decision node
- C. Use case
- D. Activity
- E. State

21 – B and D

22. In a given project, requirements are described using a modified user story. Consider the following example:

As a mobile app user, I want to be able to generate a transaction confirmation to file.

In addition, several acceptance criteria have been identified and documented for this story.

Does the above description meet the rules for describing requirements using user stories?

- A. No, the activity diagram is missing
- B. No, justification is missing
- C. Yes, as long as all acceptance criteria are identified
- D. No, no measurable business value identified

22 – B



23. Which of the following statements about the benefits of using templates for requirements documentation is true?

- A. There are very many sources of free templates
- B. Templates eliminate the need for requirements validation
- C. Templates are universal and fit any project
- D. Templates help capture and document the most relevant information

23 – D

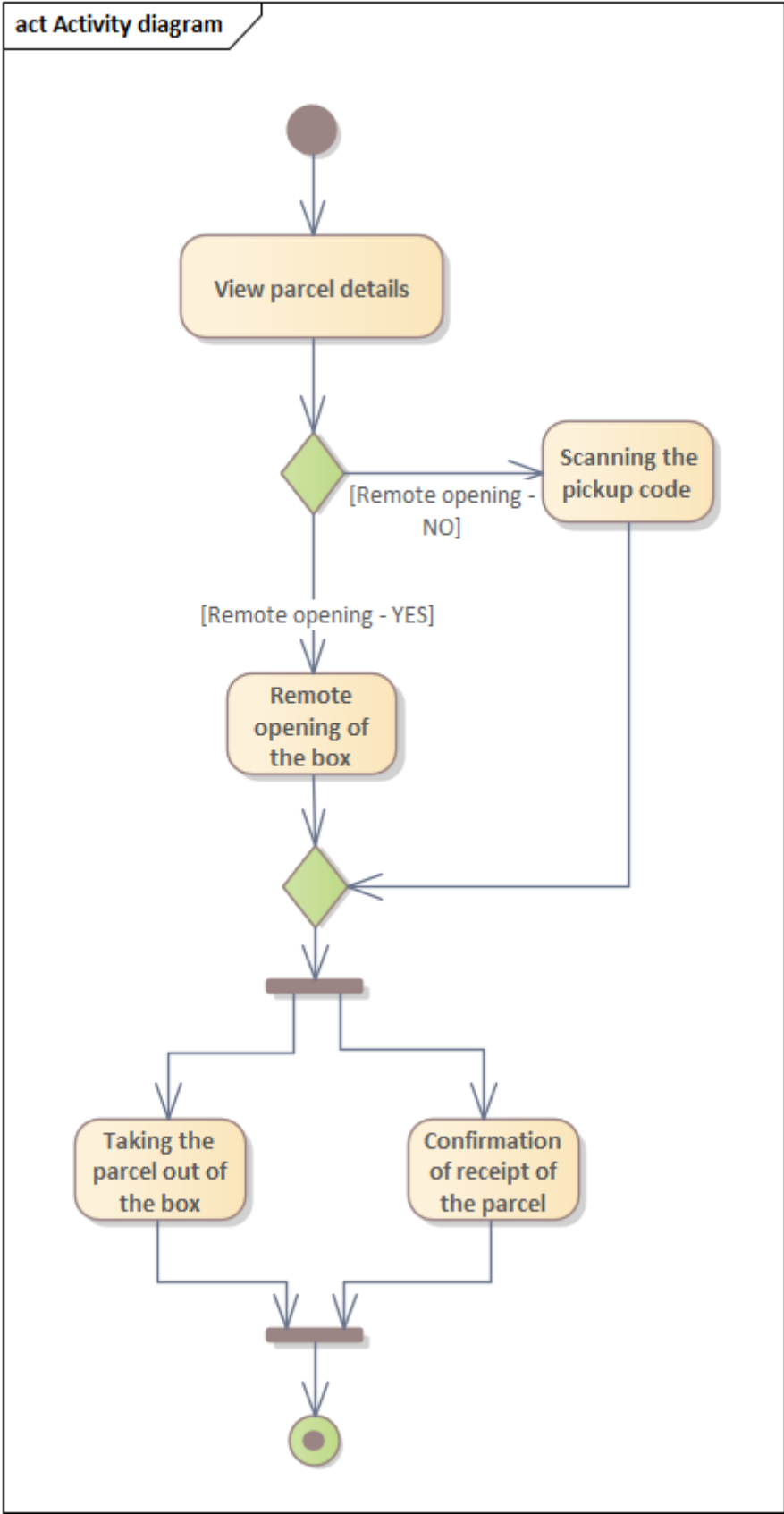
24. Modeling is one of several forms of expressing requirements. So-called languages or notations are often used for modeling. Unfortunately, the limited syntax of the modeling language means that it may not be possible to express all relevant information on the model. How can this limitation be bypassed?

- A. You can combine different notations and languages on one model to create your own notation
- B. If a piece of information cannot be modeled using a notation, it is not relevant to a particular model
- C. You can combine modeling with natural language description of requirements
- D. Notations and languages can be modified for the needs of a given project - so a new meaning can be defined for a given element

24 – C



25. The diagram below shows a simplified process for receiving a parcel.



Which of the following statements about activity flow are modeled in the diagram above?

Modeled	Not modeled / inconsistent with the diagram	
<input type="checkbox"/>	<input type="checkbox"/>	A. To open the box, you must first view the parcel details
<input type="checkbox"/>	<input type="checkbox"/>	B. If scanning the pickup code fails, you can try to open the box remotely.
<input type="checkbox"/>	<input type="checkbox"/>	C. When scanning the pickup code, it is necessary to make sure the scanner of the device is working properly.
<input type="checkbox"/>	<input type="checkbox"/>	D. Confirmation of receipt of the parcel must be done after the parcel is removed from the box.

25

A - modeled

B - not modeled / inconsistent with the diagram

C - not modeled / inconsistent with the diagram

D - not modeled / inconsistent with the diagram

26. Requirements can be acquired from a variety of sources. A typical source of requirements is: (2 answers)

<input type="checkbox"/>	A. A programmer from another project
<input type="checkbox"/>	B. A business stakeholder
<input type="checkbox"/>	C. Documentation of the business process
<input type="checkbox"/>	D. Popular systems on the market

26 – B and C

27. According to the Kano model, there is a special category of product characteristics that has an almost linear relationship between customer satisfaction and the degree to which expectations are met. Which category is being referred to? (1 answer)

<input type="checkbox"/>	A. Basic factors
<input type="checkbox"/>	B. Performance factors
<input type="checkbox"/>	C. Excitement factors
<input type="checkbox"/>	D. Needs
<input type="checkbox"/>	E. Usability factors

27 – B



28. Which group of requirements elicitation techniques highlighted in the IREB syllabus is best suited for eliciting excitement factors? (1 answer)

- | | |
|--------------------------|-------------------------------|
| <input type="checkbox"/> | A. Questioning techniques |
| <input type="checkbox"/> | B. Document-based techniques |
| <input type="checkbox"/> | C. Exploratory techniques |
| <input type="checkbox"/> | D. Idea generation techniques |

27 – D

29. Which of the following statements about requirements elicitation techniques are true, which are false?

- | True | False | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | A. Information gathering techniques are mainly used to obtain functional requirements, not suitable for obtaining quality requirements |
| <input type="checkbox"/> | <input type="checkbox"/> | B. Crowd-based techniques are best for eliciting quality requirements |
| <input type="checkbox"/> | <input type="checkbox"/> | C. Observational techniques can be used to elicit quality requirements. |
| <input type="checkbox"/> | <input type="checkbox"/> | D. Quality requirements elicitation can be done by using various techniques and using checklists based on the quality model |

29

A - false

B - false

C - true

D - true

30. Which of the statements about interviewing as a technique for obtaining requirements are true and which are false?

- | True | False | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | A. An interview is a fairly universal technique and does not require special tools |
| <input type="checkbox"/> | <input type="checkbox"/> | B. An interview can be both individual and group-based |
| <input type="checkbox"/> | <input type="checkbox"/> | C. An interview does not require much time, so it can be successfully used to obtain information from a large number of people |
| <input type="checkbox"/> | <input type="checkbox"/> | D. The effectiveness of the interview depends largely on the preparation and proper definition of the objective |

30

A – true

B – true

C – false

D – true



31. You are working on a solution to improve existing business processes. Which technique will be most appropriate if your goal is to understand and analyze how the process is being executed and identify points for improvement?

- A. Brainstorming conducted within the project team
- B. Observation of people during the execution of the business process
- C. Questionnaire asking users about desired changes in the process
- D. Interview with board members

31 – B

32. During the requirements analysis, it turns out that certain stakeholders have different opinions about the details of one of the requirements. This situation is an example: (1 answer).

- A. Conflict over requirements
- B. Validation of the solution
- C. Evaluation of the requirement in terms of its feasibility
- D. Requirements acquisition activities

32 – A

33. You and your stakeholders are discussing several requirements for a system to support the production of electronic components. One stakeholder expects the system to collect information about the time spent on each production step. Ultimately, the stakeholder needs the ability to generate reports summarizing the time spent by a production worker on a specific task. The purpose of this report would be to identify areas/stages of production that should be optimized.

The stakeholder, who is a representative of production workers, objects and says that the consequence of implementing a system that monitors working time so closely will be the risk of production errors resulting from supervised workers performing tasks in a hurry and without proper focus. What type of conflict is this scenario most likely talking about?

- A. Value conflict
- B. Relationship conflict
- C. Interest conflict
- D. Data conflict

33 – C



34. Which conflict resolution technique involves developing a solution that meets the needs of all parties involved?

- A. Overruling
- B. Agreement
- C. Voting
- D. Compromise

34 – B

35. Which validation technique will be appropriate if your goal is to have users evaluate the usability of an early version of the system?

- A. Review the requirements specification
- B. Inspection of the beta version
- C. Alpha testing
- D. Validation with a prototype

35 – D

36. You are working on configuring the requirements engineering process for a project. So far, all projects undertaken in your company have followed agile methods. Which of the factors influencing the configuration of the requirements engineering process will be particularly important in your case? (1 answer)

- A. Legal requirements
- B. Competence of the development team
- C. Overall process alignment
- D. Management strategy

36 – C

37. Which variant of the requirements engineering process would be appropriate in the case where stakeholders know and are able to specify their requirements in advance, the requirements define the established scope of the project, and are an annex to the contract between the supplier and the customer? (1 answer)

- A. An iterative, exploratory and customer-oriented process
- B. Requirements-based, linear and contractual process
- C. Prescriptive, requirements-oriented and contractual process
- D. Linear, prescriptive and customer-oriented process

37 – D



38. Which of the following answers represents the logical complete life cycle of a requirement? (1 answer)

- | | |
|--------------------------|--|
| <input type="checkbox"/> | A. New, in progress, ready for review, agreed, in implementation, ready for testing, implemented |
| <input type="checkbox"/> | B. Open, in analysis, revised, reopened |
| <input type="checkbox"/> | C. In progress, new, analysis, implementation, archive |
| <input type="checkbox"/> | D. In analysis, in review, in implementation, in testing, reported |

38 – A

39. What is the best example of a baseline in the context of requirements engineering? (1 answer)

- | | |
|--------------------------|---|
| <input type="checkbox"/> | A. Implemented system MVP |
| <input type="checkbox"/> | B. Accepted meeting notes |
| <input type="checkbox"/> | C. Stable version of requirements specification released to stakeholders for validation |
| <input type="checkbox"/> | D. A version of the use case diagram that the requirements engineer is working on |

39 – C

40. Which of the statements about requirements configuration is true and which is false?

True	False	
<input type="checkbox"/>	<input type="checkbox"/>	A. The requirements configuration contains all accepted versions of each requirement
<input type="checkbox"/>	<input type="checkbox"/>	B. The requirements configuration contains the requirements that define the scope of the final product
<input type="checkbox"/>	<input type="checkbox"/>	C. The requirements configuration may not contain all requirements defined for the product
<input type="checkbox"/>	<input type="checkbox"/>	D. The requirements configuration may contain multiple versions of the same requirement

40

A – false

B – false

C – true

D – false



41. Which of the following attributes of a requirement would be appropriate to ensure that requirements are uniquely identifiable?

- | | |
|--------------------------|------------------------------|
| <input type="checkbox"/> | A. Number |
| <input type="checkbox"/> | B. Author |
| <input type="checkbox"/> | C. Source |
| <input type="checkbox"/> | D. ID of related requirement |

41 – A

42. The following matrix shows the tracking of links between functional requirements and use cases.

Source: Wyszukiwanie i ...		Type: UseCase	Link Type: Realizator		
Target: Wyszukiwanie i ...		Type: FunctionalRequire	Direction: Both		
Target +		Wyszukiwanie i zamawianie::DO	Wyszukiwanie i zamawianie::Pra	Wyszukiwanie i zamawianie::wy	Wyszukiwanie i zamawianie::Zar
+ Source					
Wyszukiwanie i przeglądanie::UC020 Dodaj do kosz...					
Wyszukiwanie i przeglądanie::UC021 Dodaj do ulub...		↑			
Wyszukiwanie i przeglądanie::UC022 Przeglądaj inf...					
Wyszukiwanie i przeglądanie::UC023 Przeglądaj szc...					
Wyszukiwanie i przeglądanie::UC024 Wyszukaj szko...				↑	

Which statement referring to this matrix, is true?

- | | |
|--------------------------|---|
| <input type="checkbox"/> | A. All requirements are covered by use cases |
| <input type="checkbox"/> | B. Some use cases are redundant and do not add value |
| <input type="checkbox"/> | C. Not all requirements have adequate coverage |
| <input type="checkbox"/> | D. Three requirements should be additionally covered by use cases |

42 – C



43. The following requirement and test case have been documented.

Requirement REQ 021

Title: Add credit card to customer profile

Test case TC 021.1

Title: Adding credit card - customer profile

Which of the statements regarding the above artifacts and tracking of links between them (traceability) is definitely true? (1 answer)

- | | |
|--------------------------|---|
| <input type="checkbox"/> | A. There is explicit traceability between the requirement and the test case |
| <input type="checkbox"/> | B. There is implicit traceability between the requirement and the test case |
| <input type="checkbox"/> | C. Traceability between the requirement and the test case is expressed by a traceability matrix |
| <input type="checkbox"/> | D. Traceability between a requirement and a test case is expressed by links to unique IDs |

43 – B

44. What will be a reasonable criterion for prioritizing requirements? (1 answer)

- | | |
|--------------------------|-------------------------------------|
| <input type="checkbox"/> | A. Criticality of failure |
| <input type="checkbox"/> | B. Traceability |
| <input type="checkbox"/> | C. Urgency |
| <input type="checkbox"/> | D. Result of stakeholder assessment |

44 – C

45. Which of the following features is most likely to be offered by a requirements modeling tool? (1 answer)

- | | |
|--------------------------|---|
| <input type="checkbox"/> | A. Measuring and reporting product quality |
| <input type="checkbox"/> | B. Supporting requirements documentation with graphical notations |
| <input type="checkbox"/> | C. Managing relationships and artifact attributes |
| <input type="checkbox"/> | D. Workflow management |

45 – B



46. You are planning to introduce a new requirements engineering tool. You have already determined the requirements for the tool, analyzed the cost aspect, and based on your analysis of available tools and their capabilities, you have selected the right tool. In consultation with project stakeholders, you have performed a pilot on a smaller project. The pilot justified the value of introducing the tool into the organization and its alignment with existing processes . You are preparing to fully implement the tool in the organization. which aspect should you consider to increase the chances of success? Select the best answer (1 answer)

-
- A. Analyze the cost of expanding the system
-
- B. Improve business processes to maximize the benefits of using the tool
-
- C. Provide the necessary training/support for users of the tool
-
- D. Develop instructions for installing the tool
-

46 – C

