

# Examination

**SUBJECT**

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Version:

**1 Which of the following statements is NOT true?**

- [A] A requirement is a condition or capability needed by a user to solve a problem or achieve an objective.
- [B] Requirements are expectations and needs of stakeholders expressed in both documented and not documented forms.
- [C] Requirements may be related to the development process and the software product.
- [D] One of the most important sources of requirements are project stakeholders.

**2 Which of the following standards is a standard for Software Requirements Specifications?**

- [A] IEEE 830
- [B] IEEE 1233
- [C] IEEE 1362
- [D] IEEE 610

**3 Which of the following indicate a waterfall approach to system development is NOT appropriate?**

- [A] Business is volatile.
- [B] Business requirements are stable.
- [C] Domain regulations require to complete requirements analysis before starting system designing.
- [D] There are few requirements.

**4 Which of the following statements about Requirements Engineering in an Agile environment is NOT true?**

- [A] Requirements may be documented in the form of scenarios.
- [B] Requirements are managed via Product Backlog.
- [C] Commitments to requirements are made by the customer representative.
- [D] Traceability across requirements and work products is often addressed through retrospectives and demo days.

**5 Creating a solution for the implementation of the requirements is done during which phase?**

- [A] Requirements identification.
- [B] Requirements analysis.
- [C] Requirements acceptance.
- [D] Requirements specification.

- 6 Which of the following is NOT one of the common errors that occurs in Requirements Engineering?**
- [A] Imprecise expense estimate.
  - [B] Unstable requirements.
  - [C] Customer involvement.
  - [D] Gap between customer expectations and project contents.
- 7 Which of the following statements about the purpose of Requirements Engineering is NOT true?**
- [A] Requirements Engineering provides processes that develop the stakeholder's needs into detailed requirements.
  - [B] Requirements Engineering is most effective in an iterative environments.
  - [C] Requirements Engineering provides input for project planning.
  - [D] Requirements Engineering allows to establish customer's needs and expectations regarding the planned solution.
- 8 Which of the following would NOT be a risk that is related to Requirements Engineering?**
- [A] The solution does not meet the expectations of the stakeholders.
  - [B] Stakeholders are not communicating their expectations.
  - [C] Business requirements are changed in the late stage of the project.
  - [D] The specification is not clear.
- 9 Which of the following is NOT a basic role in Requirements Engineering?**
- [A] Vendor.
  - [B] Requirements Analyst.
  - [C] Client.
  - [D] Requirements Manager.
- 10 Which of the following statements about a stakeholder is NOT true?**
- [A] Stakeholders include end-users, customers, development team and external bodies.
  - [B] Stakeholders can not have conflicts of interest among each other.
  - [C] Project stakeholders may be individuals and organizations.
  - [D] Stakeholders affect or are affected by the outcome of the project.
- 11 Which of the following is NOT a skill required from a Requirements Engineering professional?**
- [A] Usability testing skills.
  - [B] Communication skills.
  - [C] Negotiation skills.
  - [D] Analytical thinking.

**12 Which of the following is a mandatory content of a contract?**

- [A] Detailed description of the planned solution.
- [B] Detailed schedule of development.
- [C] Acceptance criteria for each requirement.
- [D] List of prioritized low level requirements.

**13 Which of the following should be defined by the project vision?**

- [A] Schedule of the project.
- [B] Solutions.
- [C] The objectives to be achieved.
- [D] Measurable goals.

**14 Which of the following statements about stakeholders identification is NOT true?**

- [A] Stakeholders can create interest groups.
- [B] Stakeholders should be product's owners.
- [C] Each stakeholder may influence the design of the planned solution.
- [D] Stakeholders can be identified by analysis of the organizational structure.

**15 Which of the following is a goal of requirements identification?**

- [A] Determining and resolving requirements conflicts.
- [B] Creating a solution for the implementation of the requirements.
- [C] Modeling the requirements.
- [D] Orientating the requirements toward the project vision.

**16 As a Requirements Engineering professional, you are working on identifying requirements for a software system to be implemented in a customer organization. The system should automate some of business processes already performed within the organization.**

**You need to identify and document requirements for the solution.**

**The customer allocated two of his employees to support you in requirements identification but you find out they have serious problems with describing the business processes and are not able to provide you a clear and valuable information. After some investigation you find out there are valid work procedures and descriptions of the core business process.**

**Which of the following techniques for requirements identification would you use to support your work?**

- [A] Interviewing the customer's employees.
- [B] Reusing the specification from a previous project.
- [C] Determining requirements on the basis of existing documents.
- [D] Creating questionnaires for end-users.

**17 Which of the following statements about non-functional requirements is NOT true?**

- [A] Non-functional requirements may not be measurable.
- [B] Non-functional requirements describe the quality attributes of the system, component or function.
- [C] Non-functional requirements describe usability aspects of the system.
- [D] Non-functional requirements may limit the solution.

**18 What common problem is related with the following description of a requirement?**

**"The system should be usable."**

- [A] Lack of measurability.
- [B] Thinking in solutions.
- [C] Lack of traceability.
- [D] Inconsistency.

- 19 You are developing a solution specification from a high-level requirements specification. The application has to support processes in online book store. Orders are performed on demand by end-users, who are the clients of the customer's organization (book store).**

**The order process is the following:**

- 1. The end user searches for a book.**
- 2. The system displays a search results.**
- 3. If a specific book is available, the end user can purchase a book. Otherwise the system displays an information that the book is not available and the end user can ask the store to order it from a warehouse.**
- 4. After purchasing a book, the system updates the stock and prepares an order information for a employee of the book store who will prepare the book for delivery.**

**You are working on the description of a low-level requirement based on the following high-level requirement:**

**"The system shall automatically check if the book found by the user is available and the status should be communicated to the user."**

**Which of the following is the best low-level description of this low-level requirement?**

- [A] After the book search, the system shall display a search results. The system shall automatically check availability of all books returned as search results, and communicate it via proper message. Available books are marked with an "order" action, not available books are marked as "ask for the book".
- [B] After the end user submits search request, the system shall search in the book repository for items meeting the search criteria and automatically check their availability. The availability shall be communicated as follows: available books as marked with an "order" action, while not available books are marked as "ask for the book".
- [C] The system displays a search results marked with proper message saying if the book is available.
- [D] The system automatically checks availability of the book. Available books as marked with an "order" action, not available books are marked as "ask for the book".

- 20 What is NOT a purpose of requirements specification?**

- [A] To track and manage requirements.
- [B] To describe the problem area.
- [C] To describe the technical requirements for the solution.
- [D] To create a formal agreement on requirements to be implemented in the planned solution.

- 21 Which of the following is a standard for system performance specifications?**

- [A] IEEE 1362
- [B] IEEE 1233
- [C] IEEE 610
- [D] IEEE 830

**22 An organization has created a requirements specification in form of user stories.**

**What level of formalization most likely has been applied?**

- [A] Semi-formal.
- [B] Non-formal.
- [C] User story can not be considered as a specification.
- [D] Formal.

**23 Which of the following techniques does NOT serve to improve the quality of a requirements specification?**

- [A] Prototyping.
- [B] Self-recording.
- [C] Inspections.
- [D] Applying standards.

**24 You are developing a solution specification from a high-level requirements specification. The application has to support performing financial operations in the customer's organization. Those operations are performed on demand by end-users, who are the clients of the customer's organization. What is the first step to be performed when creating the specification?**

- [A] Identification of stakeholders.
- [B] Requirements determination.
- [C] Determination of the solution.
- [D] Requirements analysis.

**25 Which of the following is a goal of requirements analysis?**

- [A] Documenting the requirements.
- [B] Ensuring the requirements are stable and signed off.
- [C] Creating a solution for the implementation of the requirements.
- [D] Describing the solution area.

**26 Which of the following notations is most appropriate for business modeling?**

- [A] SysML.
- [B] DSM.
- [C] BPMN.
- [D] UML.

**27 Which of the following is NOT a model used during requirements analysis?**

- [A] Condition flow model.
- [B] Context model.
- [C] Decision table.
- [D] Data stream model.

**28 You are working on a solution specification for a software system that supports processing of hotel reservations. Depending on the system or user activity, the reservation may have different status.**

**Which of the following models would you use to describe this problem?**

- [A] Use Case Model.
- [B] Communication Diagram.
- [C] State Transition Model.
- [D] Activity Diagram.

**29 Which of the following statements about UML is NOT correct?**

- [A] UML supports modeling of systems of systems.
- [B] UML allows to model structural and behavioral aspects of a software.
- [C] UML is a unified notation for the analysis and design of systems.
- [D] UML supports modeling different views on the system.

**30 Which of the following statements about SysML is correct?**

- [A] UML is an extension of SysML.
- [B] SysML supports System Engineering.
- [C] SysML reuses all UML diagrams but adds some more features to model complex systems.
- [D] SysML is more complex than UML.

**31 Which of the following factors is LEAST likely to affect the cost of the project?**

- [A] The type of the project.
- [B] The maturity of the development process.
- [C] The selected project management tool.
- [D] The distribution of the project team.

**32 Which of the following statements about requirements signoff is NOT correct?**

- [A] Requirements signoff is typically the final task of the Requirements Analysis and Design activities.
- [B] Requirements signoff ensures the requirements are stable and will not be changed.
- [C] Requirements signoff reduces the risk of introducing new requirements during or subsequent to implementation.
- [D] Requirements signoff can be a project milestone.



**33 Which of the following statements about traceability is NOT correct?**

- [A] Traceability supports change impact analysis.
- [B] Traceability provides the proof of implementation.
- [C] Traceability ensures that the requirements are testable.
- [D] Traceability is used to manage developing requirements and other artefacts related to those requirements.

**34 Which of the following statements about vertical tracing is NOT true?**

- [A] It shows relationships between customer/business requirements and solution/system requirements.
- [B] It shows relationships between different types of requirements on the same level.
- [C] It shows dependencies between requirements and test cases.
- [D] It shows dependencies between various artefacts.

**35 At which step of the Change Management process is risk of a Change Request determined?**

- [A] Analysis of the change request.
- [B] Implementing the change.
- [C] Evaluating the change.
- [D] Requesting new functionality.

**36 Which of the following roles would NOT be a member of the CCB?**

- [A] Project manager.
- [B] System architect.
- [C] Sales representative.
- [D] Business analyst.

**37 Which of the following statements about acceptance criteria is correct?**

- [A] Acceptance criteria are established by the vendor business analyst.
- [B] Acceptance criteria form the basis of the Test Plan.
- [C] Acceptance criteria must be measurable and realistic.
- [D] Acceptance criteria must be stated in technical language and must be very precise.

**38 The number and complexity requirements can be used to measure which of the following?**

- [A] Project type.
- [B] The effectiveness of the business analyst.
- [C] Process maturity.
- [D] Project costs and schedule.

**39 Which of the following tools effectively supports requirements documentation, tracking, change control and communication?**

- [A] Text editors.
- [B] Requirements management tools.
- [C] Prototyping tools.
- [D] Change management tools.

**40 Which of the following is NOT supported by Requirements Engineering tools?**

- [A] Requirements and solution prototyping.
- [B] Requirements change management.
- [C] Requirements storage.
- [D] Solution validation.

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