BCS Practitioner Certificate in Requirements Engineering

Specimen Paper

Record your surname / last / family name and initials on the answer sheet.

Specimen paper only 20 questions, which are a mixture of multiple-choice and multiple-response questions – 1 mark awarded to each question. There are no trick questions.
Multiple choice questions allow only one correct answer to be selected for 1 mark.
Multiple response questions require the candidate to select a number of correct responses for 1 mark.

A number of possible answers are given for each question, indicated by either **A B C D or E**. Your answers should be clearly indicated on the answer sheet.

Pass mark is 13/20
Time allowed 30 minutes

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1 The requirements engineering framework is used within projects to support the successful delivery of appropriate solutions. What is the **correct** purpose of the requirements engineering framework?

    A It requires the analyst to follow a rigorous approach when defining the problem situation.

    B It defines the key tasks required in the business analysis process model.

    C It specifies the required approach to managing stakeholders.

    D It provides a disciplined approach to achieving high quality, agreed, and controlled requirements, enabling successful solution delivery.

2 A business analyst has identified some requirements which appear ambiguous and possibly incomplete. In order to fully understand the requirements, the analyst has arranged to meet with the stakeholder who created the requirements, one-to-one, to discuss the requirements which may help to remove the ambiguity.

Which of the following techniques is the business analyst applying?

    A Interviewing.

    B Scenario Analysis.

    C Storytelling.

    D Document Analysis.

3 An inexperienced business analyst has been asked to conduct an observation. What guidance about using observations to elicit requirements is **incorrect**?

    A Helps to identify the tacit knowledge of stakeholders.

    B Allows better understanding of the challenges faced by the stakeholder when performing the task.

    C Reveals gaps or inconsistencies that may prompt questions for subsequent investigation.

    D It has no impact on the behaviour of those being observed.

4   A business analyst is planning their approach to requirements elicitation for their Agile project and is considering how to encourage collaboration. Which of the following techniques is **most** likely to be a good starting point for requirements elicitation?

   A   Document analysis.
   B   Interviews.
   C   Workshops.
   D   Prototyping.

5   Marcus is working on a change project for a multinational organisation. His stakeholder group is large and situated in multiple offices across the globe. Timescales on the project are very tight. Marcus is considering the advantages and disadvantages of various techniques he could use to elicit requirements. Which of these statements are **true**? Select **two correct** responses.

   A   Quick preparation time is an advantage of using a workshop.
   B   Conducting interviews will be time consuming.
   C   Using prototypes may have the disadvantage of increasing stakeholder expectations of a quick delivery.
   D   Document analysis would consume too much stakeholder time.
   E   Conducting observations at the multiple office locations will help keep costs to a minimum.

6   A project team has been put in place to develop and install the next version of a company's internal telecommunication system. The business analyst has proposed that a requirements document is needed as one of the key project artefacts, but the project manager is doubtful that time and effort should be spent on its creation.

Which **three** of the following are **valid** reasons for the creation of a requirements document?

A   It helps ensure that the requirements are consistently understood.
B   It provides assurance that stakeholders' needs have been correctly interpreted.
C   It proposes a solution for senior management to consider.
D   It assists in undertaking benefits realisation after the project is implemented.
E   It helps to check stakeholder productivity.

7   A group of business analysts with different backgrounds are on a training course together. They have discussed the purpose of requirements validation in their breakout group and present back the following statements, of which only one is **correct**.

Which statement demonstrates a **correct** understanding of requirements validation?

A   Agile validation is always informal and waterfall validation is always formal.
B   Agile validation takes place at least twice, on entering the backlog and when being deemed ready for development.
C   Formal validation involves distributing the requirements without the need to collate comments or hold a review meeting.
D   Formal validation involves gaining approval of the requirements catalogue, but not the supporting models.

8   Which **two** of the following are typically used to record requirements?

A   Business Case.
B   Business Requirements Document.
C   Product Backlog.
D   Product Specification.
E   Stakeholder Map.

9 An analyst has decided to support their textual requirements with models to aid understanding and support communication.

Which **two** types of models would the analyst choose to: illustrate the business rules governing access and security, the features of the system, the order of the activities and business events that trigger the use of the new system?

A Function Model.

B Rich Picture.

C Business Process Model.

D Entity Relationship Diagram.

E Class Model.

10 Why is it important to use consistent language such as "shall" when documenting requirements?

A It makes the document easier to translate.

B It helps distinguish requirements from design decisions.

C It reduces ambiguity and clarifies what is needed without implying priority.

D It allows developers to skip requirements they disagree with.

11 Renee is analysing the quality of requirements related to the development of a pension management tool, to track the performance of pensions and redirect funds. Some requirements were elicited from a Senior Pensions Advisor. One requirement reads:

"Customers shall be able to view other savings and investments outside of their pension and assess the impact on their pension."

Which of the following **best** describes this requirement?

A Irrelevant.

B Concise.

C Testable.

D Ambiguous.

12 Amir is employed in a workplace which favours Agile methodologies. Currently, he has a large number of requirements relating to the development of a new software solution. What **should** Amir do first to enable him to slice the requirements?

  A Elaborate the requirements that will be included on the next iteration.
  B Elaborate all requirements fully at the outset.
  C Split individual requirements into smaller components.
  D Choose which requirements to include solely on prioritising these which can be delivered quickly.

13 Jack is analysing the requirements of a project relating to the upgrade of an online legal advice platform, used by various public services to advise clients on basic legal matters. There are multiple business rules (legal constraints) to be aware of, and ensuring the integrity of the information published.

In addition to modelling the requirements, which method **could** Jack use to cross-check the rules which ensure the information is appropriately controlled?

  A CRUD Matrix.
  B Activity Diagram.
  C Decision Table.
  D Decision Tree.

14 An analyst is using a business process model to examine the business rules which will shape the requirements for the way the process will be automated. They are particularly interested in the flow of the process and how decisions are made.

Which type of business rule would be elicited using this approach?

  A Action governance.
  B Data constraints.
  C Operational guidance.
  D Constraints.

15 Rachel is weighing up the benefits of using customer journey maps whilst engineering the requirements for a self-service check-in at a dentist's surgery. The check in process is lengthy because it involves completing health questionnaires and consent forms.

Rachel needs to obtain a full picture of the business need, but which of the following goals will the customer journey maps enable her to achieve? Select **three** correct responses.

A Analysing emotions of each persona used.

B Documenting customer perceptions at each stage of the journey.

C Providing measures for customer throughout.

D Establishing touchpoints that the customers will have with the process.

E Identifying the movement of data throughout the customer journey.

16 When supporting the design phase of solution development, what is a common challenge a business analyst might face related to requirements?

A Lack of any design documents.

B Designers misinterpreting or making assumptions about requirements.

C Too many technical experts providing input.

D Excessive clarity in all requirements.

17 Omar has completed the requirements analysis for a project and now requires formal validation of the requirements. Select the **correct** process for formally validating these requirements.

A Omar should present his Business Requirements Document to a review group, comprised of various stakeholders and overseen by a chairperson.

B Omar should present his Business Requirements Document to the Project Office for formal sign off, before sharing with the wider stakeholder audience.

C Omar should present his Business Requirements Document to another BA for validation.

D Omar should issue his Business Requirements Document to the Project Sponsor only.

18 Charlie is documenting a set of requirements which are linked to high-risk internal processes in a heavily regulated industry. Which **two** actions should Charlie undertake to ensure the appropriate traceability of the requirements?

A Ownership of the requirements should be assigned to the stakeholder with responsibility of the relevant business area, for decision making purposes.

B Ownership of the requirements should be assigned to the Project Manager for decision making purposes.

C The origins of the requirements - either a person or process - must be documented.

D The origins of the requirements - either a person or process - must be revisited to lower the risk.

19 A business analyst working on a high-profile project for a government communications initiative has decided to use a software support product to help manage the requirements following validation.

What are **two** key benefits of adopting a software support tool?

A Document storage.

B Document linkage.

C Check accuracy of requirements.

D Decide requirement priorities.

E Generates solutions.

20 A project is underway at a clothing accessories manufacturer. The first iteration was completed last week, but the project review board are concerned that features have been implemented which were never requested and that some features that were agreed for this release have not been implemented.

What **should** be used to demonstrate to the board that the solution delivered the agreed features?

A Peer review.

B Vertical traceability.

C Horizontal traceability.

D Change control.

End of Paper

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Answer Key and Rationale

Question	Answer	Rationale	Syllabus Section
1	D	The RE framework provides a structured approach for defining, analysing, documenting, validating and maintaining requirements. It ensures that all stakeholder needs are correctly understood, agreed, and maintained throughout the project lifecycle.	1.2
2	A	Interviews give the BA an opportunity to discuss specific requirements one to one and investigate any new areas that have not been previously mentioned. Scenario analysis and storytelling can be used during an interview but would be specifically used to elicit tacit knowledge. Document analysis is done by the BA without involving the stakeholder.	2.1
3	D	Being observed can be unnerving, and so people may change their behaviour.	2.3
4	C	Workshops create a collaborative environment for stakeholders to understand each other's viewpoint and reach a consensus of ideas or acceptance of the project.	2.3
5	B & C	Quick preparation is not an advantage of workshops Document analysis doesn't generally rely on stakeholder involvement. The travel implications will increase costs rather than keep them to a minimum. Interviewing a large and global stakeholder group will be time consuming. Using prototypes may set unrealistic expectations.	2.3
6	A, B & D	Requirements do not propose solutions; they articulate the business need.	3.2

Question	Answer	Rationale	Syllabus Section
7	B	Agile validation takes pace twice, when the backlog is established and when the backlog is maintained, so that the team understand when a requirement is deemed ready for development. Informal and formal validation can be used in Agile and Waterfall projects. Whilst Reviewers do not have to meet together physically, all review comments would need to be collated. Formal validation would include the review of the catalogue and any supporting models that are included in the BRD.	5.3
8	B & C	Requirements are documented typically in a BRD for linear projects, and the Product Backlog for Agile projects. A business case presents and evaluates one or more courses of action that will address a problem or enable the organisation to grasp a business opportunity. A Product Specification usually sets out the design of the solution and is produced in response to the requirements documentation. Stakeholder maps are used to assess the level of power and interest they have in a project.	3.2
9	A & C	A Function Model such as a Use Case Diagram, illustrates the functions (also known as features) of the system and the association to the actors. Actors illustrate the access and security requirements. A Business Process Model illustrates the access and security requirements using swim lanes and the flow or order in which the activities are undertaken and the business events that trigger the activities. A rich picture is designed to capture the business situation as a whole rather than illustrate the detailed requirements for a solution. Data models do not include triggers, activities or their order. They do illustrate business rules, but these rules govern how data is associated to each other, rather than access and security. Data models do not include triggers, activities or their order. They do illustrate business rules, but these rules govern how data is associated to each other, rather than access and security.	3.2

Question	Answer	Rationale	Syllabus Section
10	C	Consistent use of strong, mandatory language like "shall" ensures that every stakeholder interprets requirements the same way and understands they are all mandatory, without suggesting priority.	3.2
11	D	The requirement is ambiguous. For instance, what other savings and investments should a customer be able to view? What impacts? How what rules govern the assessment? The purpose of the Pension Management tool is to track performance of pensions. To be able to view other saving and conduct an assessment of impacts would appear to be beyond the scope of that tool. The requirement is not concise or testable, as it is unclear how the requirement could be met or tested.	4.3
12	C	Amir would need to elaborate the prioritised requirements before they can be sliced. When using Agile, there is no need to elaborate all the requirements at the outset. If Amir were to prioritise solely based on the fact they could be delivered quickly, he may miss the requirements that are important to the business or essential for the solution to work.	4.4
13	A	A CRUD matrix records the event, use case or process that causes an entity or class to be created, read, updated or deleted. This would allow Jack to cross-check that the rules are being correctly applied to the data. An activity diagram is used to model the requirements which Jack has already done. The activity model by itself will not provide the cross-check to the rules applied to the data. Decision tables and trees do not cross-check across models. They are usually used to help illustrate conditional rules formatting within a solution. Decision tables and trees do not cross-check across models. They are usually used to help illustrate conditional formatting within the solution.	4.4

Question	Answer	Rationale	Syllabus Section
14	C	Business process models illustrate both Constraints and Operational Guidance. However, since the analyst is trying to extract the rules that govern how the process should be conducted or flow, they would be considered Operational Guidance.	4.4
15	A, B & D	Customer journey maps examine processes from the customer's perspective. Answers C & E relate to the business' perception of the journey rather than the customer's.	4.4
16	B	Even with well-documented requirements, there is always a risk of misinterpretation during design. The business analyst's role is to clarify any ambiguities and ensure the design aligns with the intended business needs.	5.2
17	A	Since Formal validation is being sought, it is usual, but not compulsory, to have a review group meeting. Even if the document is circulated for comment and a meeting is not held, the document would be issued to all the parties responsible for validating the requirements. BA's do not sign off requirements on behalf of the business unless they are the proxy product owner.	5.2
18	A & C	The owner typically has responsibility for the business area affected by the requirement so may be called upon to make decisions about the requirement. The Project Manager is responsible for the day to day running of the project rather than individual requirements. To support horizontal traceability, the origin (or source) of the requirement must be documented. Once the origin of the requirement has been established, it is unlikely to change and doesn't need to be revisited.	6.1
19	A & B	Software support tools are designed to support the organisation to store their documentation securely. The ability to link other documentation or create links between individual requirements help the BA to locate requirements and undertake impact assessments.	6.1

Question	Answer	Rationale	Syllabus Section
		However, whilst these tools may support the BA to manage the requirements, they do not check the accuracy of the information stored within them, nor do they determine priority or generate solutions.	
20	**C**	Horizontal traceability traces the requirement from inception to delivery. It answers the question, 'What happened to this requirement?' The details of the released solution will be captured against each requirement.	6.2