BCS Practitioner Certificate in Requirements Engineering

Specimen Paper

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

**Sample 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 or D. Your answers should be clearly indicated on the answer sheet.

Pass mark is 13/20
Time allowed 30 minutes

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This professional certification is not regulated by the following United Kingdom Regulators - Ofqual, Qualifications in Wales, CCEA or SQA
1. A business analyst is working on a project that requires extensive investigation of the current situation. They need to collect a limited amount of data from a wide range of stakeholders, and understand stakeholders’ responses to a range of particular circumstances and processes. Due to the nature of the organisation, these stakeholders are based in various locations around the world and usually communicate via video-conference.

Which of the following pairs of investigation techniques would **BEST** meet the analyst's needs?

A. Scenario analysis and observation.
B. Scenario analysis and interviews.
C. Document analysis and interviews.
D. Interviews and observation.

2. What would be the impact of **NOT** including the source and owner attributes of each requirement in a requirements catalogue?

A. The requirements would no longer be atomic.
B. The requirements would be more difficult to prioritise.
C. The requirements would be difficult to trace.
D. The requirements would no longer be specific.

3. A Business Analyst has undergone requirements elicitation and is beginning to analyse the set of requirements.

Which of the following are valid requirements analysis activities?

a) Checking the requirements align with the Terms of Reference document.
b) Ensuring that there are no conflicts in the set of requirements.
c) Using the Change Control Process if any of the requirements need further discussion with stakeholders.
d) Prioritising the requirements.
e) Gaining sign-off.

A. a, b and d only.
B. a, b and c only.
C. c, d and e only.
D. b, c and e only.
4 A project manager has stated that he wants to be able to demonstrate to senior management that requirements, when built, will fulfil the business objectives. What element of requirements management will offer this?

A Configuration control.
B Vertical traceability.
C Change control.
D Horizontal traceability.

5 Ethan, Emma and Jitesh are all members of a team that aims to produce a new expenses approval system for their organisation. Ethan has applied his expert knowledge of Human Resources (HR) to suggest some potential adjustments to the requirements set, to make the project more effective. He has agreed to take these ideas back to his HR teams to confirm them. Once the requirements are confirmed, they will go to Jitesh for sign-off. The whole team (made up of the project team and business representatives) has been discussing a potential issue regarding implementation dates. Emma has agreed to schedule some time with Jitesh to propose and agree with him her detailed plan for the corrective action to minimise any deviation from the plan.

Based on the scenario above, insert the name of each individual in the CORRECT role below.

A SME: Jitesh
Project Manager: Emma
Project Sponsor: Ethan
B SME: Ethan
Project Manager: Emma
Project Sponsor: Jitesh
C SME: Ethan
Project Manager: Jitesh
Project Sponsor: Emma
D SME: Emma
Project Manager: Jitesh
Project Sponsor: Ethan
Mason is a business analyst working for a large food manufacturer that wants to streamline its processes to achieve greater efficiency.

He is planning his requirements elicitation activities and has written a checklist of the tasks he needs to carry out:

- Spend face-to-face time with the key stakeholders in person or virtually.
- Spend time on the production line, to see how the processes work.
- Build one-to-one relationships with the sponsors of the project.
- Review the existing procedures and processes around production line tasks.

Which of the following sets of techniques would meet ALL the tasks on Mason's list?

A Observation, interview and document analysis only.
B Observation and workshop only.
C Focus group, interview, document analysis and storytelling only.
D Interview, storytelling and observation only.

The PineHut Company wishes to improve the efficiency and accuracy of its ordering process. Requirements have been identified for an online design system, to allow customers to visualise their summer house before placing an order. Kira, the business analyst, is undertaking a prioritisation exercise and has the following requirement from the production director, who is the project sponsor.

'Ve shall produce a report listing customers who design a summer house but do not go on to purchase one. This is essential to our business development plan. The list will be sequenced by the cost of the design and geographical region.'

The production director has also said that he will not use this report until six months after the initial release of the system, because his team will be too busy with orders after the initial launch.

Which priority SHOULD Kira give this requirement?

A Want to have but won't have this time.
B Must have.
C Could have.
D Should have.
8 The business analyst for a project has elicited, analysed and documented the requirements of the identified stakeholders; these have been validated and agreed.

A few days after this agreement took place, the project manager approached the analyst with a request to change several requirements.

What course of action SHOULD the business analyst take?

A Accept the request of the project manager and change the requirements.
B Ask all stakeholders whether they agree to the requested changes.
C Ask the project manager to submit a change request for the required changes.
D Reject the project manager's request to make changes to the requirements.

9 One of the requirements of a new trading management system is that only senior account managers shall be able to view the transactions of high-value clients. These transactions shall not be accessible to any other members of staff.

How would this restriction be classified?

A Non-functional requirement.
B Functional requirement.
C Technical requirement.
D General requirement.
10 The following statements concern the properties of MoSCoW requirements prioritisation:

a) Best suited to linear waterfall projects.
b) Effective tool for prioritising use cases.
c) Only applies to functional and non-functional requirements.
d) Priorities could change across project iterations.

Which of these statements are TRUE?

A  b and d only.
B  a and c only.
C  a and b only.
D  c and d only.

11 Several requirements have been elicited in a project. One of them specifies the need for the system to download overnight, to a central repository, all the transactions made during the day in the remote offices. The project team is not sure that this is technically possible.

What might help them to analyse this requirement?

A  Document analysis.
B  A CRUD matrix.
C  Scenario analysis.
D  The requirements catalogue.

12 Janelle is a business analyst who has been asked to make some changes to a baselined requirement, via the formal change request process.

Which area of the Requirements Engineering Framework would this request be classed as?

A  Management.
B  Elicitation.
C  Validation.
D  Analysis.
Demi is a business analyst working on a project involving multiple stakeholders, with the overall aim of implementing a solution which will allow eligible citizens to vote in their local elections through an online platform. Demi would like to be able to gather stakeholders together to elicit and explore their requirements, and to allow stakeholders to hear one another’s perspectives.

Which of the following would be the **MOST SUITABLE** elicitation technique for Demi to use?

A  Interview.  
B  Workshop.  
C  Scenario Analysis.  
D  Observation.

Derren is a business analyst who has elicited a vast range of requirements relating to the development of a charity’s tracking tool, which shall allow the charity to recruit and manage volunteers, allocate appropriate resources to relevant causes and monitor their performance on an ongoing basis.

Derren has identified that some of the requirements which have been elicited may not align with the charitable nature of the organisation and its objectives.

What would allow Derren to explore this theory?

A  Vertical Traceability.  
B  Prioritisation.  
C  Horizontal Traceability.  
D  Configuration Management.
Dwayne is investigating the current customer journey for a cinema chain who offers monthly and annual memberships along with online booking services and optional upgrade packages.

Which item **SHOULD** Dwayne create to ensure he is assessing this customer journey from the perspective of a specific customer, and not the “customer” user as a whole?

A User Roles.  
B Personas.  
C Actors.  
D Use Case.

A review group has been created to validate the requirements of a project. The group consists of multiple stakeholders.

Which of the following stakeholders would be **LEAST LIKELY** to be part of this review group?

A Project Sponsor.  
B Developers.  
C Testers.  
D Suppliers.

Robert plans to build use case diagrams to model the requirements of a solution being scoped. Robert would like to ensure that the relevant stakeholders are able to understand and review these models, to allow them to comment on their suitability. However, the stakeholders in question are unfamiliar with use case diagrams.

Which of the following actions would **NOT** be helpful in ensuring stakeholders understand these models?

A Provide written and/or verbal guidance on their structure.  
B Build the models in collaboration with the stakeholders.  
C Use an alternative method to minimise the workload.  
D First demonstrate a use case model for a system the stakeholders are already familiar with.
Trevor is a business analyst, assigned to a project building a solution to help maintain and test emergency protocols at a power station. This is a complex, high-risk project involving stakeholders from a range of business areas. Trevor must ensure there is no ambiguity in the requirements and plans to model and share these requirements with the stakeholders.

Which TWO of the following will NOT resolve the potential issue of ambiguous requirements?

A  Providing opportunity for stakeholders to ask questions.
B  Providing additional clarity around requirements.
C  Ensuring financial feasibility of the requirements.
D  Ensuring user-centricity of the development approach.
Devon is a business analyst who is working on a solution for a booking management system for a concert venue.

Which of the following business rules is NOT correctly represented in the diagram?

A. A customer must be able to select seats.
B. A customer may post their ticket for re-sale.
C. An employee may book tickets (on behalf of a customer).
D. An employee may take payment (on behalf of a customer).
Stuart is a business analyst assessing the current process for arranging response to out-of-hours alarm calls to a housing complex. The following business rules are in place:

- A residence can log any number of incidents.
- An incident must be related to a residence.
- Call-out staff can only have one or two call-out requests.

Which of the following statements is NOT correctly represented in the diagram?

A. An incident cannot have more than one call-out request.
B. Call-out staff can only have one or two call-out requests.
C. A residence can log any number of incidents.
D. An incident must be related to a residence.

End of Paper
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Explanation / Rationale</th>
<th>Syllabus Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>This is the most suitable pairing as both scenario analysis and interviews will allow the BA to gather data and responses to specific circumstances from many stakeholders, since observation is unlikely to be possible due to location.</td>
<td>2.4</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>Removing these unique features will prevent accurate traceability.</td>
<td>3.1</td>
</tr>
<tr>
<td>3</td>
<td>A</td>
<td>The other activities would be considered validation and management.</td>
<td>6.1</td>
</tr>
<tr>
<td>4</td>
<td>B</td>
<td>Vertical traceability ensures alignment with business objectives and policy.</td>
<td>8.3</td>
</tr>
<tr>
<td>5</td>
<td>B</td>
<td>SME – Ethan as he has specialist knowledge. Project Manager – Emma as she is managing the delivery. Project Sponsor – Jitesh as he signs off the project.</td>
<td>5.1</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>These methods allow all planned activities to take place, with no additional activity required.</td>
<td>2.4</td>
</tr>
<tr>
<td>7</td>
<td>D</td>
<td>This requirement is mandatory so should be delivered, however it is not necessary to deliver on the first increment.</td>
<td>6.2</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>As these requirements have been validated and agreed, a formal change request is necessary.</td>
<td>8.4</td>
</tr>
<tr>
<td>9</td>
<td>A</td>
<td>This requirement is needed to ensure appropriate use of the system, but the system could perform without it.</td>
<td>3.1</td>
</tr>
<tr>
<td>10</td>
<td>A</td>
<td>MoSCoW is concerned with prioritising requirements, which may change as the project develops.</td>
<td>6.2</td>
</tr>
<tr>
<td>11</td>
<td>C</td>
<td>Scenario analysis would allow the analyst to check the technical feasibility of this requirement, particularly in this timeframe.</td>
<td>6.5</td>
</tr>
<tr>
<td>12</td>
<td>A</td>
<td>Change requests form part of requirements management.</td>
<td>1.2</td>
</tr>
<tr>
<td>13</td>
<td>B</td>
<td>Conducting a workshop could meet all of Demi’s desired criteria.</td>
<td>2.1</td>
</tr>
<tr>
<td>14</td>
<td>A</td>
<td>Vertical traceability would show if the requirements align with the business objectives.</td>
<td>8.6</td>
</tr>
<tr>
<td>15</td>
<td>B</td>
<td>Personas allow the further breakdown of a user role, to better analyse the journey from different perspectives and with different possible desires and outcomes.</td>
<td>7.2</td>
</tr>
<tr>
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<tr>
<td>16</td>
<td>D</td>
<td>Suppliers are unlikely to be involved at this stage, hence the requirement for testers.</td>
<td>5.5</td>
</tr>
<tr>
<td>17</td>
<td>C</td>
<td>This approach would not be helpful in understanding use cases, as it would not directly address the issue.</td>
<td>4.1</td>
</tr>
<tr>
<td>18</td>
<td>C,D</td>
<td>User centricity would be unlikely to remove ambiguity and financial feasibility cannot be established through this technique.</td>
<td>4.2</td>
</tr>
<tr>
<td>19</td>
<td>D</td>
<td>There is not association between “Employee” and “Payment” on the diagram.</td>
<td>4.3</td>
</tr>
<tr>
<td>20</td>
<td>B</td>
<td>Call out staff can have any number of call out requests (0..*)</td>
<td>4.4</td>
</tr>
</tbody>
</table>