



# BCS Practitioner Certificate in Systems Integration

## 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 or D** (or **E** for multiple response questions). 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 Which **one** of the following responsibilities falls under the role of a system integrator?
  - A Developing a comprehensive plan of how different components will work together.
  - B Identifying and communicating an organisation's IT strategy.
  - C Requesting solutions to specific business problems.
  - D Maintaining software applications.
  
- 2 Which **one** of the following is a **true** when using legacy systems for a solution integration?
  - A Legacy systems are generally more secure.
  - B The cost of integrating legacy systems is usually less expensive.
  - C Legacy systems are usually more difficult to scale.
  - D Legacy systems all relate to a single standard approach.
  
- 3 Which **two** of the following would be **most appropriate** to discover facts when doing a system investigation?
  - A Conduct scenario analysis.
  - B Start prototyping.
  - C By trial and error.
  - D Conduct a webinar.
  - E Present solution to senior managers.
  
- 4 Which of the following is a type of feasibility study?
  - A Logical.
  - B Scalable.
  - C Ethical.
  - D Legal.

- 5 You are developing a new software as a service (SaaS) platform to handle tracking packages being delivered in an online shopping environment.

What **one** of the following is an example of a functional requirement?

- A The system must verify serial numbers.
- B The system must be operational 99% of the time.
- C The system must be usable by staff.
- D The system must be designed to allow for modular updates.

- 6 Your organisation is integrating a new system. You have been asked to document how data will be structured by modelling the database tables and views.

This is an example of what type of model?

- A Physical.
- B Logical.
- C Conceptual.
- D Hierarchical.

- 7 Which if the following is a BPMN 2.0 diagram element?

- A File.
- B Stability.
- C Benefits.
- D Events.

- 8 Which **one** of the following explains a processing integration?

- A Combining two user interfaces from different systems into a cohesive experience.
- B Integrating different applications to automate the inventory, billing, and shipping systems.
- C Integrating two sets of data so they can be queried with one request.
- D Creating a unified repository for documentation.

9 Which **one** of the following would indicate that a synchronous approach is best?

- A When improving system responsiveness is important.
- B When constant reliability of a system is not crucial.
- C When real-time data validation is required between services.
- D When generating reports for a payroll system.

10 A system at a wholesale company requires data retrieval from a desktop application to indicate stock availability in the warehouse.

Which combination of technologies is **best** to use?

- A JSON and FTP.
- B HTML and HTTP.
- C HTTP and JSON.
- D XML and JSON.

11 A large organisation needs to integrate and manage complex, distributed systems with a high degree of flexibility, scalability, and reusability.

Which API architectural style should they choose?

- A SOA.
- B REST.
- C Microservices.
- D SOAP.

12 An organisation has a requirement for their system that messages are to be sent asynchronously.

Which solution should they implement?

- A ESB.
- B IFTT.
- C Stack.
- D Message Queue.

13 Which **two** of the following are examples of workflow automation software?

- A FIFO.
- B Workato.
- C XML.
- D Camunda.
- E Kissflow.

14 An organisation wants to ensure that only authorised personnel are able to follow security procedures.

Which **one** of the following is an example of an administrative security control?

- A Biometric access to where sensitive equipment is stored.
- B Security procedure training sessions.
- C Security guards stationed at entrances to the building.
- D Regular software updates.

15 An organisation is planning to release a large-scale update of their logistics software on the anniversary of the organisation's creation.

Which **two** statements correctly describe the implementation?

- A It is a "phased" type of implementation.
- B It is a "parallel type of implementation.
- C It is a "big bang" type of implementation.
- D The entire system will be replaced as one.
- E The system will be implemented one subset at a time.

16 Which two of the following are **true** of MVP?

- A It ensures compliance with contractual obligations and detailed specifications.
- B It is only released when it is a fully reliable system.
- C It increases the risk of project failure due to unmet client expectations.
- D It allows for greater flexibility in adapting to market changes post-launch.
- E It provides basic performance needs to its users.

17 What are the benefits CMDB version control?

Select **two** options.

- A By enabling the tracking of code changes and their authors.
- B By providing a platform for continuous integration and deployment.
- C It provided a central repository to store information about configurations.
- D By enforcing consistent coding standards across the team.
- E By having the project manager as the final decision-maker for all changes.

18 When designing a system that handles personal data in the UK, which actions do not comply with the Data Protection Act 2018?

Select **two** responses.

- A Encrypting personal data both in transit and at rest.
- B Collecting personal data without informing the users.
- C Conducting regular data protection training for staff.
- D Retaining personal data indefinitely.
- E Processing data for a specific purpose.

19 During which phase of the system lifecycle do stakeholders gather requirements through surveys, interviews, and workshops?

- A Analyse.
- B Test.
- C Develop.
- D Plan

20 Which **one** of the following is not part of a post-project review?

- A Lessons learnt.
- B Requirements gathering.
- C Benefits delivered.
- D ROI analysis.

**End of Paper**

# BCS Practitioner Certificate in Systems Integration Techniques

## Answer Key and Rationale

Question	Answer	Rationale	Syllabus Section
1	A	This is considered a responsibility of a System Integrator.	1.1
2	C	Outdated or obsolete technology of legacy systems may not support modern features which can hinder scalability.	1.3
3	A and B	Scenario analysis and prototyping are two valid methods of fact-finding approaches.	2.1
4	D	This is covered in the BCS courseware and syllabus.	2.2
5	A	Input validation (verifying serial numbers) refers to a specific function of the system.	2.4
6	A	This is a model of "what" data.	2.5
7	D	"Events" are an element of BPMN 2.0	2.7
8	B	This form of integration focuses on the process (and not the user interface, database, or files).	3.1
9	C	A synchronous approach would be the best way to carry out real-time validation.	3.2
10	C	HTTP send a request to the server.	3.3

<b>11</b>	<b>A</b>	SOA provides a framework for integrating different systems and technologies through well-defined service interfaces.	3.4
<b>12</b>	<b>D</b>	A message queue will ensure reliable delivery.	3.5
<b>13</b>	<b>B and E</b>	Kissflow and Workato are examples of workflow automation software.	3.6
<b>14</b>	<b>B</b>	Security procedures and training relates to administrative security controls.	4.1
<b>15</b>	<b>C and D</b>	In a Big Bang or direct implementation, the entire system is replaced at once, but this is not the case with a phased implementation.	4.2
<b>16</b>	<b>D and E</b>	An MVP focusses on providing a minimum viable product that meets the most basic needs of the user.	4.3
<b>17</b>	<b>A and C</b>	A configuration management database allows for a systematic approach to config management.	4.4
<b>18</b>	<b>B and D</b>	The DPA requires that personal data be encrypted, and staff be given regular training.	5.1
<b>19</b>	<b>A</b>	This is crucial to identify key requirements and expectations of all parties.	5.2
<b>20</b>	<b>B</b>	Lessons learnt, benefits delivered, and ROI analysis are all part of the post-project review.	5.3