BCS Foundation Certificate in Architecture Concepts and Domains

Specimen Paper

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

Specimen paper only 20 multiple choice 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.

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 What are the three levels of architecture listed in the syllabus?

A Enterprise, domain, and solution.
B Enterprise, software, and infrastructure.
C Strategic, tactical, and operational.
D System, software, and component.

2 What type of standards drive competency and ethical practices?

A Enterprise.
B Technical.
C Professional.
D Developmental.

3 What is CORRECTLY defined as "controlling activity and decision making to ensure that the change delivered matches the specification agreed with the business"?

A Project management.
B Compliance.
C Architecture.
D Governance.

4 What is identified using architecture gap analysis?

A Any gaps in the capacity of the architecture team.
B The variance between performance and targets.
C The scale and scope of required change.
D Unexploited business opportunities.
5 Which of the following is the CORRECT categorisation for a business competitor launching a new product or service?

A A driver for architecture.  
B A market intervention.  
C A strategic change.  
D An architecture description.

6 Which of the following is an objective of business architecture?

A Reducing the costs involved in business architecture.  
B Enhancing the capacity for transformational change.  
C Defining business strategy and enacting operational tactics.  
D Increasing the size of the business operation model.

7 What type of artefact is used to document specific activities as part of a business architecture?

A Business operation model.  
B Business process model.  
C Business model.  
D Use case model.

8 What are three kinds of application?

A Full-stack, multi-layer, and client-server.  
B Unit, module, and interface.  
C Low, medium, and high-level.  
D Platform, business, and generic.
9 What is an objective of applications architecture?

A Eliminate duplication among applications.
B Reduce the number of applications.
C Increase the number of applications.
D Develop new and improved applications.

10 What does the following definition CORRECTLY describe?

"Knowledge concerning objects such as facts, events, things, processes or ideas, including concepts, that within a certain context has a particular meaning."

A Information.
B Data.
C Policy.
D Model.

11 Select the architecture domain MOST associated with the activity of "Recording and integrating data definitions and models."

A Applications Architecture.
B Solutions Architecture.
C Data Architecture.
D Software Architecture.

12 Which of the following statements CORRECTLY describes an objective of infrastructure architecture?

A To ensure all designs are robust against attack.
B To create a solution which addresses a specific business problem, need or opportunity.
C Produce effective and efficient designs that satisfy organisational requirements.
D To ensure compliance with enterprise architecture principles and policy directives.
13 Select the architecture domain **MOST** associated with the technical reference model artefact.

A Infrastructure.
B Solution.
C Software.
D Application.

14 Which software architecture method allows the movement and exchange of data between two or more applications?

A Modularity.
B APIs.
C Encryption.
D Authentication.

15 Which of the following CORRECTLY describes an objective of software architecture?

A Ensure software is maintainable and can be modified when business needs change.
B Ensure the organisation has all of the software applications it requires.
C Maximising the effectiveness and efficiency of gathering data.
D Minimise the use of software in the organisation.

16 Which of the following is a **KEY** concept in application architecture security?

A Segmentation.
B Modularity.
C Identification.
D Encryption.
17 In infrastructure architecture security which **KEY** activity can be used to expose vulnerabilities?

A Change analysis.
B Creating use case models.
C Penetration testing.
D Encryption.

18 Which solution architecture stakeholder category is **MOST LIKELY** to participate in the operation of a solution?

A Business actors.
B Senior managers.
C Business owners.
D Product owner.

19 What **two** stages of the solution architecture lifecycle follow Validation?

A Analysis and Logical design.
B Completion and Discovery.
C Logical design and Roadmap.
D Roadmap and Completion.

20 What type of solution requirement **CANNOT** also be a technical requirement?

A Non-functional requirement.
B Business requirement.
C Functional requirement.
D High priority requirement.

_end of paper_
# BCS Foundation Certificate in Architecture Concepts and Domains
## Answer Key and Rationale

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Syllabus Section</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>1.1</td>
<td>Candidate must be able to recognise the three key levels of architecture as defined in the syllabus as enterprise, domain and solution.</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>1.3</td>
<td>Professional standards are directly related to the performance of the individual and their skills. Other standards are related to task and legal requirements or obligations.</td>
</tr>
<tr>
<td>3</td>
<td>D</td>
<td>1.5</td>
<td>This is the definition of governance as per the syllabus.</td>
</tr>
<tr>
<td>4</td>
<td>C</td>
<td>1.7</td>
<td>Gap analysis is used to define the scope of change by identifying the gap between the currently and desired situations.</td>
</tr>
<tr>
<td>5</td>
<td>A</td>
<td>1.8</td>
<td>This would be categorised as a driver for architecture as it is a cause or reason for change to be considered to a process, system or way of working.</td>
</tr>
<tr>
<td>6</td>
<td>B</td>
<td>2.1</td>
<td>Business architecture makes change possible.</td>
</tr>
<tr>
<td>7</td>
<td>B</td>
<td>2.2</td>
<td>A business process model is used to model/visualise specific activities within an organisation. Other models listed are used for modelling specific roles or scenarios.</td>
</tr>
<tr>
<td>8</td>
<td>D</td>
<td>3.6</td>
<td>These are the three broad categories of application as defined in the syllabus.</td>
</tr>
<tr>
<td>9</td>
<td>A</td>
<td>3.1</td>
<td>Applications architects must aim to eliminate duplication between applications.</td>
</tr>
<tr>
<td>10</td>
<td>A</td>
<td>4.4</td>
<td>This is the definition of information as provided in the syllabus.</td>
</tr>
<tr>
<td>11</td>
<td>C</td>
<td>4.3</td>
<td>This activity is specifically data related and therefore is most associated with data architecture.</td>
</tr>
<tr>
<td>12</td>
<td>D</td>
<td>5.1</td>
<td>Infrastructure architecture ensures that the solution works with the enterprise requirements. Distractors are objectives from other architecture areas.</td>
</tr>
<tr>
<td>13</td>
<td>A</td>
<td>5.2</td>
<td>A technical reference model is used in infrastructure architecture.</td>
</tr>
<tr>
<td>14</td>
<td>B</td>
<td>6.5</td>
<td>APIs allow for this exchange of information. Distractors are security related.</td>
</tr>
<tr>
<td>Question</td>
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<td>Rationale</td>
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<tr>
<td>15</td>
<td>A</td>
<td>6.1</td>
<td>Ensuring maintenance is a key objective of software architecture, whereas reducing the volume of software is not. Other distractors are related to other domain areas.</td>
</tr>
<tr>
<td>16</td>
<td>C</td>
<td>7.6</td>
<td>Identification is specifically related to applications security.</td>
</tr>
<tr>
<td>17</td>
<td>C</td>
<td>7.7</td>
<td>Penetration testing is used to identify weaknesses before they are exploited externally.</td>
</tr>
<tr>
<td>18</td>
<td>A</td>
<td>8.6</td>
<td>Business actors are operationally involved, whereas other distractors are more likely to be involved at a planning or financial level.</td>
</tr>
<tr>
<td>19</td>
<td>D</td>
<td>8.5</td>
<td>These are the next two stages of the solution architecture lifecycle.</td>
</tr>
<tr>
<td>20</td>
<td>B</td>
<td>8.4</td>
<td>A business requirement is a non-technical requirement.</td>
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