



# BCS Foundation Certificate in Agile

## 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. Mark only one answer to each question. There are no trick questions.

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

This is a specimen paper only. The full exam is 40 multiple choice questions with a pass mark of 26/40.

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- 1 When software development is delivered using a linear software development life cycle this means that?
- A All activities to develop the software happen in iterations of small batches.
  - B The activities of software development occur sequentially from analysis through delivery to testing.
  - C The testing activities related to software development occur prior to any code being written and delivered.
  - D The software is created incrementally by building each component starting from any database then proceeding with business logic and presentation layer.

- 2 The four value statements within the Agile Manifesto are written in a manner where one set of activities or actions of value are compared to others.

This comparison is used to describe?

- A Activities or actions that are carried out compared to those that are not carried out.
- B Activities or actions that have value in being completed compared to those with no value in being completed.
- C Activities or actions that are considered to have more value compared to those that may have less value.
- D Activities or actions that need to be carried out sequentially so that all of them are undertaken during the delivery.

- 3 One of the principles of the Agile Manifesto is repeated below:

*Build projects around motivated individuals.  
Give them the environment and support they need,  
and trust them to get the job done.*

In order to build motivated teams within an environment of support, it is **BEST** to?

- A Have line managers evaluate their staff and assign people to teams based on skills and performance.
- B Allow teams to self organise into teams with all the skills that are required and hold each other accountable.
- C Have practice leads identify the most capable people from each discipline and assign them to capability roles within teams.
- D As people join the organisation they should be allocated to the team that has the highest need for people.

- 4 Agile is a term used for a collective group of ways that teams deliver products and solutions that was formalised as a phrase in 2001. One of the comments made by organisations struggling to adopt agile is that it is only suitable for software development.

Which of the below describes one of the earliest created methods that is now considered to be within the agile group of methods and frameworks?

- A A method developed to build cars after observing how supermarkets operate.
- B The process of developing systems after observing how users interact with current systems.
- C The process of writing tests that define a technical requirement before writing code to deliver the solution.
- D The process of having a design phase where brainstorming occurs to understand the needs of a product.

- 5 Organisations and teams often fail to understand how the wastes described by Lean regarding physical products relate to code.

Which of the below does **NOT** describe the impact of producing more code than is required to deliver a specific solution to a requirement?

- A The value of additional code and tests created will not decay over time as they can always be used for another work item.
- B As time passes the context for why code and tests were created is lost even where extensive documentation is provided.
- C Either new people or those who created existing code will have to spend time understanding the code created.
- D Libraries that code relies on may become deprecated or obsolete as core languages are updated and developed.

- 6 When an Agile team is delivering a solution, which of the following describes the preferred means of interaction with customers and users?

- A The team should directly communicate with customers and users on the delivery of goals identified by the Product Owner.
- B The customers and stakeholders should tell the team exactly what requirements they want delivered.
- C The team should only interact with the Product Owner and only the Product Owner should interact with customers.
- D The team should not interact with customers or users, as this should be managed by the relevant support team.

7 Teams that apply Agile ways of working are considered better at responding to change.

Which aspect of Agile ways of working directly supports this ability to react to change?

- A Delivering in phased releases and having lessons learned meetings.
- B Using short cycle times of delivery where feedback is regularly received.
- C Having a manager work directly with the team that manages the delivery plan.
- D Ensuring user research is carried out after each major release of the product.

8 When an Agile team has created an iteration or sprint plan with an Agile Product Owner, which of the following statements is **NOT** true?

- A The team has forecasted what items they expect to be able to deliver.
- B If an item is undeliverable they will discuss this with the Product Owner.
- C If the Product Owner identifies a higher priority they can discuss this with the team.
- D All work for that iteration or sprint is now fixed and no changes can be made.

9 When an Agile team is self-organising what does this mean?

- A They decide what items to be delivered provide value.
- B They should decide if they need to work in the office or from home.
- C They decide who should get promoted within the organisation.
- D They decide how to deliver items of work that will build the solution.

10 If every event in Scrum is an opportunity to inspect and adapt, which **two** contribute to continuous improvement?

- A The sprint review and sprint planning.
- B The retrospective and sprint planning.
- C The retrospective and backlog refinement.
- D The daily scrum and retrospective.

- 11 A key principle behind the Agile Manifesto is working at a sustainable pace. You are coaching a team which has a deadline to deliver the first release of their product.

To hit the deadline and deliver the required Minimum Viable Product (MVP), which of the following would you advise?

- A The organisation should reward the team members that commit to working overtime to hit the deadline.
- B The Product Owner should work with the stakeholders to identify the areas of highest value to deliver.
- C Testing should be deferred until the end of the delivery phase and delivered once the functionality is complete.
- D The organisation should bring in more people based on the known velocity per person to ensure the team can deliver.

- 12 You are working with an agile team, which of the observations below would be an example of them applying an agile way of working?

- A Each developer completes all work on the item assigned to them.
- B All code work is done by programmers before handing to QA for test.
- C Only the coding work is done and all testing is left until integration.
- D The team will collaborate in groups to deliver all the work for each item.

- 13 You are working with a new and mixed ability Agile team that requires new apprentices to work with experienced people.

How **SHOULD** you coach the team to manage areas of development for the new apprentices?

- A Include a blame button as part of the release process so that any release that breaks the current build can be assigned to the responsible party.
- B Where errors occur this should be noted and during the retrospective carry out a root cause analysis of how the problem occurred.
- C Coach the team to work in pairs so that those with experience can share their knowledge and build confidence in new colleagues.
- D Arrange for the team to go out for beer and pizza on a weekly or monthly basis to build relationships between team members.

**14** Scrum is a specific framework that is part of the group of methods and frameworks collectively known as Agile. In the Scrum framework there are only three roles that form part of a Scrum team.

Of the list below which is considered a role within Scrum?

- A** Agile Coach.
- B** Product Manager.
- C** Development Team.
- D** Team Lead.

**15** You are working with an Agile team that holds regular retrospectives.

During these retrospectives which of the below would **NOT** be considered an objective to achieve?

- A** Identifying any areas of skills within the team that could be developed.
- B** Assessing if there are any improvements in how the team is applying Agile.
- C** Discussing and assessing issues around the interpersonal relationships in the team.
- D** Understanding the part of the product that should be delivered next.

**16** During backlog refinement, when ensuring an item is ready to be delivered by an Agile team which practice would the team **NOT** adopt to refine the item?

- A** Specification by example.
- B** Detail all requirements.
- C** Impact mapping.
- D** Story mapping.

**17** Agile teams can improve the velocity they achieve during delivery by . . .

- A** Improving estimation and collaboration techniques.
- B** Forecasting more work during planning sessions.
- C** Increasing the number of people on the team.
- D** Carrying out more analysis on items during refinement.

**18** Which of the following would **NOT** be considered a practice that would help a team achieve continuous delivery?

- A** Continuous integration.
- B** Three Amigos sessions.
- C** Versioning requirements documents.
- D** Test Driven Development.

**19** Work in progress limits often prevent teams starting new items until those currently in progress are completed.

Which of the below frameworks creates a sense of urgency by applying these limits?

- A** Scrum.
- B** Kanban.
- C** LeSS.
- D** Extreme Programming.

**20** To avoid scaling issues in Agile deliveries, the organisation **SHOULD** apply which of the following options?

- A** Decompose products into independent goals.
- B** Employ system integration consultants.
- C** Send their staff on an Agile training course.
- D** Hire multiple Agile coaches.

**End of Paper**

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## BCS Foundation Certificate in Artificial Intelligence Answer Key and Rationale

Question	Answer	Explanation / Rationale	Syllabus Sections
1	B	Requires identification of a description of a linear approach such as Waterfall. Distractors are either non-linear or incorrect descriptions of delivery approaches.	1.1
2	C	Examines a basic understanding of the Agile Manifesto. Distractors are misinterpretations of the way in which the values in the Manifesto are applied.	1.4
3	B	Requires an understanding of the concept of 'self-organising teams' and its connection with motivation. Distractors are examples of common anti-patterns.	2.2
4	A	Requires both recognition that Agile is not just for software development and recollection of a specific example from early days. Distractors are not Agile methods.	3.2
5	A	If candidates understand how the Seven Wastes of Lean relate to over-production of code and documentation they will correctly identify the three distractors as valid descriptions.	3.3
6	A	Agile teams value customer collaboration over contract negotiation so distractors are examples of non-collaborative ways of working.	4.1
7	B	Requires an understanding of the correlation between regular feedback and the ability to change and how this feedback is generated by an Agile way of working.	5.1
8	D	The distractors describe scenarios where change occurs and should be reacted to. The key is <b>NOT</b> true and a common misconception of the rules of Scrum.	5.2
9	D	Asks for an understanding of how self-organising teams deliver solutions. Distractors are plausible alternatives but not related to the Agile mindset.	6.2
10	B	Requires knowledge and understanding of how improvement opportunities are identified and actioned in Scrum events, underpinned by the Pillars of Scrum.	6.3
11	B	The principle of sustainable pace requires the Agile team to vary only the scope of what is delivered based on highest business value. The distractors all vary cost or quality.	6.6
12	D	The Agile mindset requires teams to collaborate and focus on delivery of working products i.e. autonomy and purpose. Distractors detail either individual behaviour or incomplete work.	6.7
13	C	Psychological safety depends on teams understanding that individuals will not be singled out for blame. Experienced team members will take responsibility for new members to create confidence and trust.	6.8

Question	Answer	Explanation / Rationale	Syllabus Sections
14	C	The three Scrum roles are Product Owner, Scrum Master and Development Team. Distractors are roles commonly occurring in Agile teams not using Scrum.	7.1
15	D	The purpose of a retrospective is for the team to reflect on how to become more effective, as described in each of the distractors. Technical product road-mapping would not be an appropriate objective.	8.1
16	B	Distractors are all appropriate techniques for refining backlog items. Detailing all requirements is a common practice used for linear delivery methods.	8.2
17	A	Requires an understanding of velocity, what factors influence improvements in velocity and the relationship with estimation and collaboration.	8.3
18	C	The distractors are all commonly used, well known techniques that aid continuous delivery. Versioning requirements documents is not an Agile practice.	8.4
19	B	Candidates will need to recognise that applying WIP limits is a fundamental part of the Kanban framework. Distractors are plausible Agile methods or frameworks.	9.1
20	A	The adoption of scaling tools is widespread so candidates need awareness of them. However, the Agile Manifesto discourages use of tools so there should be an awareness of techniques that can aid scaling without resorting to tools and methods such as SAFe, LeSS and Scrum@Scale.	9.2