ITIL® 4 Specialist

Sustainability in Digital & IT
Candidate Syllabus

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1 Introduction

The purpose of this document is to outline:

- the learning outcomes of the ITIL 4 Sustainability in Digital & IT qualification and the assessment criteria that a candidate is expected to meet for each learning outcome (with reference to the *ITIL 4 Sustainability in Digital & IT* publication)
- the examination design, in terms of question types to be used, exam duration, and administrative considerations
- the weightings (number of questions) for each learning outcome, assessment criteria and 'Bloom's level' (level of cognitive processing required to answer the question/task, according to Bloom's (revised) taxonomy).

The target audience for this document is:
Candidates taking the Sustainability in Digital & IT qualification.

This module focuses on providing candidates with an understanding of what 'sustainability' means and how it can deliver value. In addition, this module also provides candidates with an understanding of the practical steps required to develop and implement a sustainability strategy, as well as the practical skills necessary to enable an organization to deliver value by introducing sustainability practices.

2 ITIL 4 Sustainability in Digital & IT

The table below specifies the learning outcomes of the ITIL 4 Sustainability in Digital & IT, and the assessment criteria used to assess a candidate's achievement of these learning outcomes, subsequent to a course of study. There are two forms of assessment in this qualification; the practical assignments, and the MCQ (multiple choice question) exam. More information can be found in sections 3 and 4 of this document regarding the different forms of assessment.

Learning Outcome	Assessment Criteria	BL
1. Understand the key concepts of sustainability	1.1 Describe the benefits of sustainability for an organization (1.3-1.3.8)	BL 2
	1.2 Describe the key concepts of sustainability: a) Sustainability (1.1-1.1.1) b) Supply chain (upstream), operations (in-house), end-of-use (downstream) (2.3)	BL 2
	1.3 Explain the purpose of the UN sustainable development goals and their role in an organization's sustainability (1.1.2, 2.2.4)	BL 2
	1.4 Explain the purpose of the UN global compact principles and their role in organizations' sustainability (2.2.5)	BL 2
	1.5 Describe the triple bottom line model and the scope of each of the three pillars (1.1.3)	BL 2
	1.6 Describe the concept of externalities (4.3.1)	BL 2
	1.7 Describe the key challenges of sustainability: a) Growing human population (2.3.2) b) Waste management (2.3.5, 2.4.3) c) Greenhouse gas emission (2.3.6) d) Digital poverty (2.4.1) e) Digital carbon footprint (2.4.2)	BL 2
	1.8 Describe the key sustainability solutions: a) Corporate social responsibility (1.1.4) b) Responsible sourcing (2.3.3) c) Sustainable consumption and production (2.3.4) d) Circular economy (2.3.1, 5.2.1.1)	BL 2
2. Understand the value, benefits, costs, and risks of sustainability	2.1 Describe the purpose of a materiality assessment (2.2.1, 3.2.1 – 3.2.1.3)	BL 2
	2.2 Describe the key sources of organizational sustainability risks (3.2.2)	BL 2
	2.3 Describe the key organization-level stakeholder groups and their expectations (3.2.4)	BL 2

Learning Outcome	Assessment Criteria	BL
	2.4 Describe the key types and sources of sustainability standards and regulations (3.3.1)	BL 2
	2.5 Explain the role of services and the service economy in sustainability (5.2.1.4-5)	BL 2
	2.6 Explain the recommendations for sustainability Return on Investment (ROI)/Value on Investment (VOI) (4.3.4)	BL 2
3. Understand how digital and information technology support sustainability	3.1 Explain the role of digital technology in sustainability (5.2.2-5.2.2.2)	BL 2
	3.2 Describe how digital technology impacts sustainability (2.4 (including subsections & tab 2.2), 2.1)	BL 2
	3.3 Explain how sustainable business models are supported by digital/IT (5.2.1.5)	BL 2
4. Know how to plan sustainability for an organization	4.1 Explain the role of sustainability in an organization's vision (2.2, 2.2.3)	BL 2
	4.2 Describe the key due diligence considerations for sustainability (3.2.3)	BL 2
	4.3 Explain the key concerns of achieving sustainability in a volatile, uncertain, and complex environment: a) Principles-based approach vs procedures-based approach vs model-based approach (6.3.1.1, 6.3.1.2) b) Clear, complicated, complex, and chaotic systems (6.3.1.2)	BL 2
	4.4 Describe the three dimensions (aspects) of strategic planning (4.2.1-4.2.1.4): a) Sustainability business model (4.2.1, 4.2.1.3) b) Sustainable products and services (4.2.1, 4.2.1.2) c) Organizational ecosystem (4.2.1, 4.2.1.4)	BL 2
	4.5 Describe the key elements of an organizational sustainability strategy (5.2)	BL 2
	4.6 Describe the key elements of sustainability culture (5.4.3)	BL 2
	4.7 Know how to address sustainability in an organization's vision (2.2 - 2.2.6)	BL 3
	4.8 Know how to perform a materiality assessment (3.2.1 - 3.2.1.3)	BL 3
	4.9 Know how to create and use a stakeholder map (3.2.4)	BL 3
	4.10 Know how to perform a sustainability risk assessment (3.2.2)	BL 3
5. Understand how organizational sustainability is assessed, maintained, and improved	5.1 Describe the key concepts of measurement and reporting (7.2.1, 7.2.3): a) Metrics Key Performance Indicators (KPIs)	BL 2
	5.2 Explain how the following support sustainability: a) Innovations (8.6) b) Communication and collaboration (8.4-8.4.1, 8.5-8.5.5)	BL 2

Learning Outcome	Assessment Criteria	BL
	c) Audits (8.3) d) Governance (8.3)	
	5.3 Explain how the following ITIL practices support sustainability: a) Organizational change management (6.4.1.5) b) Workforce and talent management (6.4.1.5) c) Strategy management (6.4.2.4) d) Software development and management (6.4.4.1) e) Supplier management (6.4.3.1) f) Knowledge management (6.4.1.5) g) Project management (6.4.2.4) h) Infrastructure and platform management (6.4.4.1)	BL 2

3 Case study assessment

The case study has been created for the practical assignments of the ITIL 4 Specialist: Sustainability in Digital & IT course.

It describes two fictional companies; any resemblance to real companies is unintentional. The necessary information on these companies will be provided during your trainering by the Accredited Training Organization.

Participants of the course are expected to work on the practical assignments in small groups, or individually, if they are resubmitting an assignment.

Practical assignments are assessed by the trainer(s) of the course.

3.1 CASE STUDY OVERVIEW

Materials allowed	Any	This is an 'open book' assessment. Any available materials are allowed to be used during the assignments, including the ITIL 4: Sustainability in Digital & IT publication.
Exam duration	Variable	Duration: • (if group work) Four assignments of 60 minutes • (if individual work) Four individual written assignments of 60 minutes each in individual format.
Number of marks	32 marks	Number of assignments: 4 Marks: Each assignment is worth 8 marks. There are 32 marks available. There is no negative marking.
Pass mark	24 marks	75% or higher – a raw score of 24 marks or above.
Level of thinking	Bloom's level 2 & 3	"Bloom's level" describes the type of thinking needed to answer the question. For Bloom's level 2 questions, candidates need to show understanding of the concepts, methods, and principles of sustainability. For Bloom's level 3 questions, you need to demonstrate application of these concepts, methods, and principles.
Question types	Assignment	All four assignments are based on a case study which describes two companies engaged in a service relationship. All assignments address between one and two assessment criteria.

3.2 CASE STUDY SYLLABUS

The learning outcomes and assessment criteria that relate to the case study are in the table below.

Learning Outcome	Assessment Criteria	BL
1. Understand the key concepts of sustainability	1.3 Explain the purpose of the UN sustainable development goals and their role in an organization's sustainability (1.1.2, 2.2.4)	BL 2
	1.5 Describe the triple bottom line model and the scope of each of the three pillars (1.1.3)	BL 2
3. Understand how digital and information technology support sustainability	3.1 Explain the role of digital technology in sustainability (5.2.2 5.2.2.2)	BL 2
4. Know how to plan sustainability for an organization	4.4 Describe the three dimensions (aspects) of strategic planning (4.2.1-4.2.1.4): a) Sustainability business model (4.2.1, 4.2.1.3) b) Sustainable products and services (4.2.1, 4.2.1.2) c) Organizational ecosystem (4.2.1, 4.2.1.4)	BL 2
	4.7 Know how to address sustainability in an organization's vision (2.2- 2.2.6)	BL 3
5. Understand how organizational sustainability is assessed, maintained, and improved	5.1 Describe the key concepts of measurement and reporting (7.2.1, 7.2.3): a) Metrics b) Key Performance Indicators (KPIs)	BL 2

The assessment criteria that are covered within the practical assignment are identified in the table below:

Assessment criteria	Assignments
1.3 Explain the purpose of the UN sustainable development goals and their role in an organization's sustainability (1.1.2, 2.2.4)	1
4.7 Know how to address sustainability in an organization's vision (2.2 - 2.2.6)	1
1.5 Describe the triple bottom line model and the scope of each of the three pillars (1.1.3)	2
3.1 Explain the role of digital technology in sustainability (5.2.2 - 5.2.2.2)	2
4.4 Describe the three dimensions (aspects) of strategic planning (4.2.1 - 4.2.1.4): a) Sustainability business model (4.2.1, 4.2.1.3) b) Sustainable products and services (4.2.1, 4.2.1.2) c) Organizational ecosystem (4.2.1, 4.2.1.4)	3
5.1 Describe the key concepts of measurement and reporting (7.2.1, 7.2.3): a) Metrics b) Key Performance Indicators	4

4 MCQ assessment

The MCQ exam consists of 35 questions, each of which has four answer options. For each question, one option is correct and the other three are incorrect.

4.1 EXAM OVERVIEW

Materials allowed	None	This is a 'closed book' exam. The ITIL 4: Sustainability in Digital & IT publication should be used for study, but are NOT permitted to be used in the exam.
Exam duration	60 minutes	Candidates taking the exam in a language that is not their native or working language are allowed 25% extra time, i.e. 75 minutes in total.
Number of marks	35 marks	There are 35 questions, each worth 1 mark. There is no negative marking.
Pass mark	23 marks	Candidates need to get 23 questions correct (65%) to pass the exam.
Level of thinking	Bloom's levels 2 & 3	"Bloom's level" describes the type of thinking needed to answer the question. For Bloom's 2 questions, candidates need to show understanding of the concepts, methods and principles of sustainability. For Bloom's 3 questions, candidates need to demonstrate application of these concepts, methods and principles of Sustainability.
Question types	Standard classic, Negative, & List	The questions are all 'multiple choice'. For the 'standard classic' questions, candidates have a question and four answer options. 'Negative' questions are 'standard' question in which the stem is negatively worded. For the 'list' questions, there is a list of four statements and candidates have to select two correct statements from the list.

4.2 MCQ EXAM SYLLABUS

The learning outcomes and assessment criteria that relate to the MCQ exam are in the table below.

Learning Outcome	Assessment Criteria	BL	Marks
1. Understand the key concepts of sustainability	1.1 Describe the benefits of sustainability for an organization (1.3-1.3.8)	2	1
	1.2 Describe the key concepts of sustainability: c) Sustainability (1.1-1.1.1) d) Supply chain (upstream), operations (in-house), end-of-use (downstream) (2.3)	2	1
	1.3 Explain the purpose of the UN sustainable development goals and their role in an organization's sustainability (1.1.2, 2.2.4)	2	1
	1.4 Explain the purpose of the UN global compact principles and their role in organizations' sustainability (2.2.5)	2	1
	1.5 Describe the triple bottom line model and the scope of each of the three pillars (1.1.3)	2	1
	1.6 Describe the concept of externalities (4.3.1)	2	1
	1.7 Describe the key challenges of sustainability: f) Growing human population (2.3.2) g) Waste management (2.3.5, 2.4.3) h) Greenhouse gas emission (2.3.6) i) Digital poverty (2.4.1) j) Digital carbon footprint (2.4.2)	2	1
	1.8 Describe the key sustainability solutions: e) Corporate social responsibility (1.1.4) f) Responsible sourcing (2.3.3) g) Sustainable consumption and production (2.3.4) h) Circular economy (2.3.1, 5.2.1.1)	2	1
2. Understand the value, benefits, costs, and risks of sustainability	2.1 Describe the purpose of a materiality assessment (2.2.1, 3.2.1 – 3.2.1.3)	2	1
	2.2 Describe the key sources of organizational sustainability risks (3.2.2)	2	1
	2.3 Describe the key organization-level stakeholder groups and their expectations (3.2.4)	2	1
	2.4 Describe the key types and sources of sustainability standards and regulations (3.3.1)	2	1

Learning Outcome	Assessment Criteria	BL	Marks
	2.5 Explain the role of services and the service economy in sustainability (5.2.1.4-5)	2	1
	2.6 Explain the recommendations for sustainability Return on Investment (ROI)/Value on Investment (VOI) (4.3.4)	2	1
3. Understand how digital and information technology support sustainability	3.1 Explain the role of digital technology in sustainability (5.2.2-5.2.2.2)	2	1
	3.2 Describe how digital technology impacts sustainability (2.4 (including subsections & tab 2.2), 2.1)	2	1
	3.3 Explain how sustainable business models are supported by digital/IT (5.2.1.5)	2	1
4. Know how to plan sustainability for an organization	4.1 Explain the role of sustainability in an organization's vision (2.2, 2.2.3)	2	1
	4.2 Describe the key due diligence considerations for sustainability (3.2.3)	2	1
	4.3 Explain the key concerns of achieving sustainability in a volatile, uncertain, and complex environment: c) Principles-based approach vs procedures-based approach vs model-based approach (6.3.1.1, 6.3.1.2) d) Clear, complicated, complex, and chaotic systems (6.3.1.2)	2	1
	4.4 Describe the three dimensions (aspects) of strategic planning (4.2.1-4.2.1.4): d) Sustainability business model (4.2.1, 4.2.1.3) e) Sustainable products and services (4.2.1, 4.2.1.2) f) Organizational ecosystem (4.2.1, 4.2.1.4)	2	1
	4.5 Describe the key elements of an organizational sustainability strategy (5.2)	2	1
	4.6 Describe the key elements of sustainability culture (5.4.3)	2	1
	4.7 Know how to address sustainability in an organization's vision (2.2 - 2.2.6)	3	2
	4.8 Know how to perform a materiality assessment (3.2.1 - 3.2.1.3)	3	2
	4.9 Know how to create and use a stakeholder map (3.2.4)	3	2
	4.10 Know how to perform a sustainability risk assessment (3.2.2)	3	2
5. Understand how organizational sustainability is assessed, maintained, and improved	5.1 Describe the key concepts of measurement and reporting (7.2.1, 7.2.3): b) Metrics Key Performance Indicators (KPIs)	2	1
	5.2 Explain how the following support sustainability: e) Innovations (8.6) f) Communication and collaboration (8.4-8.4.1, 8.5-8.5.5)	2	1

Learning Outcome	Assessment Criteria	BL	Marks
	g) Audits (8.3) h) Governance (8.3)		
	5.3 Explain how the following ITIL practices support sustainability: i) Organizational change management (6.4.1.5) j) Workforce and talent management (6.4.1.5) k) Strategy management (6.4.2.4) l) Software development and management (6.4.4.1) m) Supplier management (6.4.3.1) n) Knowledge management (6.4.1.5) o) Project management (6.4.2.4) p) Infrastructure and platform management (6.4.4.1)	2	2

5 ITIL 4 Sustainability in Digital & IT Examination Design

5.1 EXAMINATION ADMINISTRATION

Duration: 60 minutes

NOTE: Candidates taking the exam in a language that is not their native or working language may be awarded 25% extra time, i.e., 75 minutes in total.

Materials permitted: The multiple-choice examination is a 'closed book' examination. No materials other than the examination materials are permitted.

Prerequisites: The candidate must have attended an accredited training course for this module (the recommended duration for this training is 3 days).

5.2 QUESTION TYPES

All 35 questions are Objective Test Questions (OTQs), which present four options from which one option is selected. Distractors (wrong answers) are options that candidates with incomplete knowledge or skill would be likely to choose. These are generally plausible responses relating to the syllabus area being examined. Question styles used within this type are: 'standard', 'list' (2 correct items), and, exceptionally, 'negative' standard OTQ.

Example 'standard' OTQ:

Which is a source of best practice?

a) Q
b) P
c) R
d) S

Example 'list' OTQ:

Which statement about service asset and configuration management is CORRECT?

1. It does Q
2. It does P
3. It does R
4. It does S

a) 1 and 2
b) 2 and 3
c) 3 and 4
d) 1 and 4

NOTE: Two of the list items are correct. List style questions are never negative.

Example 'negative' standard OTQ:

Which is NOT a defined area of value?

a) Q
b) P
c) R
d) S

NOTE: Negative questions are only used as an exception, where part of the learning outcome is to know that something is not done or should not occur.

5.3 SCORING

Number of questions: 35

Marks: Each question is worth 1 mark. There are 35 marks available.

There is no negative marking.

Provisional pass mark: 23 marks (approx. 65%)

5.4 WEIGHTINGS BY BLOOM'S LEVEL

There are 27 questions at Bloom's level 2 = Approx. 77%

There are 8 questions at Bloom's level 3 = Approx. 23%

5.5 WEIGHTINGS BY LEARNING OUTCOME

These weightings are for the MCQ exam only.

Learning Outcome	No.OTQs	Approx. weighting
1. Understand the key concepts of sustainability	8	23.0%
2. Understand the value, benefits, costs, and risks of sustainability	6	17.0%
3. Understand how digital and information technology support sustainability	3	9.0%
4. Know how to plan sustainability for an organization	14	40.0%
5. Understand how organizational sustainability is assessed, maintained, and improved	4	11.0%

6 Certification

The sustainability certification is based on of the two assessment types described above. A candidate must successfully pass both the multiple-choice exam and the practical assignments to achieve the certification. Successful fulfilment of the practical assignments is a prerequisite for the MCQ exam as described in the table below.

Scenario		Next steps
MCQ exam	Practical assignments	
Passed	Passed	If the other prerequisites that are required by the syllabus are fulfilled, the candidate is issued a Sustainability in Digital and IT certificate
Failed	Passed	The candidate should rebook and pass the exam to gain the certification
N/A	Failed	The candidate should be assigned an individual written assignment(s) and achieve the passing score in the practical assignments before taking the exam
Failed	Failed	The candidate should repeat the training and the exam to gain the certification