

ISO 9001 Quality Management Systems Foundation

Syllabus



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1. Introduction

ISO/IEC 9001: Quality Management Systems (QMS) is the recognized International standard, which defines the requirements for a service or product provider to deliver managed services or products of an acceptable quality for its customers. This standard is framework independent. As Quality becomes more vital to organizations seeking to achieve strategic goals on a daily basis, top performing service or product providers need to demonstrate world class service capabilities aligned to strategic goals. The ISO/IEC 9001 standard for Quality Management Systems allows an organization to demonstrate achievement of excellence and compliance with global best practices for quality Management.

PEOPLECERT's ISO 9001 Foundation level qualification covers the **knowledge** required for a candidate to prove a solid understanding of the content and requirements of the international standard, **ISO/IEC 9001: Quality Management Systems**. In short, the Foundation certification covers the knowledge required to gain an **understanding** of the **content** and **requirements** of the international standard ISO/IEC 9001: Quality Management Systems. Other available levels of certification cover more advanced knowledge and application of the standard.

2. Target Group/Audience

This qualification is the **first level** of the ISO 9001 certification scheme provided by PEOPLECERT, and is aimed at anyone working within a service provider organization (internally or externally) who may require to have and demonstrate a solid **knowledge** and **understanding** of the **ISO/IEC 9001 standard** and its **content**. The certification can also cater for candidates seeking personal certification, also in regards to their knowledge and understanding of the requirements and the content of the standard.

This qualification will provide the **Foundation** level of knowledge to its holders and will certify that they have a solid understanding of the standard and its content.

Note that this qualification **does not** provide the **advanced** level of knowledge for:

- (a) staff responsible for managing implementation of the standard in a service provider organization
- (b) external or internal auditors
- (c) external consultants or managers

This advanced level of knowledge is covered in the next levels of the ISO/IEC 9001 certification scheme provided by Peoplecert.

3. Learning Objectives

As this is the **Foundation** level course, candidates will be introduced to the principles and core elements of the ISO/IEC 9001 standard for Quality Management Systems, and more specifically:

- **ISO/IEC 9001:2008:** the standard which defines the requirements for a Quality Management System.
- **ISO/IEC 9000:2008:** which deals with the fundamentals of quality management systems.

Holders of **PEOPLECERT's ISO 9001: Quality Management Systems Foundation** Certification will be able to demonstrate their knowledge, ability, competence and understanding in:

- Definitions and principles of quality management in accordance with ISO/IEC 9001.

- Objectives and requirements in each section of the specification.
- Scope, aims and use of the ISO/IEC 9001 Specification and Code of Practice.
- Processes and objectives of ISO/IEC 9001 and Quality management (QM).
- Fundamental requirements for a quality management system (QMS).
- Eligibility and scoping statement requirements.
- Requirements of the quality management system and the Plan, Do, Check, Act cycle.
- How assessments, reviews and internal audits of quality Management systems against the requirements of the standard are used.
- Application of the requirements in an organization.

4. Examination

The ISO/IEC 9001 Foundation Certification Exam is designed to validate a candidate's knowledge of the contents and requirements of the standard and will allow for further development along the ISO/IEC 9001 – Quality Management certification path. The **Foundation** exam focuses on the following **two (2)** categories in the cognitive domain of **Bloom's taxonomy**¹:

- **Knowledge**
- **Comprehension**

4.1 Entry Criteria/Training Requirements

No specific entry criteria exist for candidates of the ISO 9001 Foundation level examination. However, it is strongly recommended that candidates have at least a basic knowledge of quality management concepts and terminology and have undergone some formal training on the subject with a proposed duration of **16 hours**. A detailed breakdown of these training hours, per topic area is provided in the syllabus section.

4.2 Assessment Approach

The assessment approach used for the Foundation certification focuses on the **two basic** categories of Knowledge and Comprehension.

Knowledge is defined as recalling previously learned material, from facts to theories and represents the lowest level of learning outcomes in the cognitive domain. Such learning outcomes are turned in assessment objectives that include knowing and recalling such as:

- Common and/or basic terms, definitions, concepts and principles
- Specific compliance requirements and facts
- Processes, procedures and assessment methods

Comprehension is the lowest level of understanding and entails the ability to grasp the meaning of the material taught, including some sort of interpretation, translation or estimation during the process. Such learning outcomes and in turn assessment objectives go beyond simply recalling information and may include:

- Understanding facts, concepts and principles
- Interpreting material (i.e. charts, graphs, text)
- Justifying a Process, procedure and assessment method

¹ The Bloom's taxonomy defines **six (6)** levels of learning in the **cognitive** domain (know, comprehend, apply, analyze, evaluate, create), which are both sequential and cumulative and move from the simple to the complex. In order to achieve the 6th level of learning, it must be ensured that the previous five levels have been mastered.

The assessment incorporates the above learning outcomes as it uses assessment objectives that cater for the above cognitive domain categories.

4.3 Examination Format

The following table details the examination format:

Delivery	Computer (web) or Paper based
Type	40 Multiple choice questions <i>Single answer, one of four possible answers</i> <i>Each question is awarded one (1) mark</i>
Duration	1 hour (60 minutes) <i>For non-native speakers or candidates with a disability, an additional 15 minutes of extra time is allowed.</i>
Pass Mark	65% (26/40)
Invigilator / Supervisor / Proctor	Yes <i>Physical or Web proctoring</i>
Open Book	No <i>No materials are allowed in the examination room</i>
Prerequisites	None
Distinction	N/A
Certification validity	N/A

The tests are derived from a regularly updated question test bank (QTB) based on the test specification detailed below. Questions are used interchangeably among test sets. The overall difficulty level of each test is the same with any other test. A candidate is never assigned the same test in the case of multiple examination attempts.

4.4 Detailed Syllabus

The syllabus contains references to the established ISO/IEC 9001 standard and is structured into sections relating to **major subject headings** and numbered with a single digit section number. The **recommended training hours, per Syllabus Category** are also provided in this table. Note that for the Foundation level of certification all questions pertaining to the Knowledge set are **knowledge** and **understanding** items (level 1 & 2 only).

At the end of the training session, allow **30 minutes** for the candidates to familiarize themselves with the exam process and the sample questions. An additional hour could be provided for the sample test and/or answering the sample test for better preparation of the exam.

Category	Ref	Knowledge Set
QMS-1.1 Process Approach, Scope, Terms and Definitions	QMS-1.1.1	Process Approach
	QMS-1.1.2	Scope of ISO/IEC 9001
	QMS-1.1.3	Application of the ISO 9001 Standard
	QMS-1.1.4	ISO 9000:2008 - Fundamentals and Vocabulary
Proposed Training Time: 120 minutes		
QMS-1.2 Quality Management System	QMS-1.2.1	General Requirements
	QMS-1.2.2	General Documentation Requirements
	QMS-1.2.3	Quality Manual
	QMS-1.2.4	Control of Documents
	QMS-1.2.5	Control of Records
Proposed Training Time: 90 minutes		
QMS-1.3 Management Responsibility	QMS-1.3.1	Management Commitment
	QMS-1.3.2	Customer Focus
	QMS-1.3.3	Quality Policy
	QMS-1.3.4	Quality Objectives
	QMS-1.3.5	Quality Management System Planning
	QMS-1.3.6	Responsibility and authority
	QMS-1.3.7	Management Representative
	QMS-1.3.8	Internal Communication
	QMS-1.3.9	Management Review
Proposed Training Time: 90 minutes		
QMS-1.4 Resource Management	QMS-1.4.1	Provision of resources
	QMS-1.4.2	Human Resources
	QMS-1.4.3	Infrastructure
	QMS-1.4.4	Work Environment
Proposed Training Time: 60 minutes		
QMS-1.5 Product Realization	QMS-1.5.1	Planning of product realization
	QMS-1.5.2	Customer-related processes
	QMS-1.5.3	Design and development
	QMS-1.5.4	Purchasing
	QMS-1.5.5	Production and service provision
	QMS-1.5.6	Control of monitoring and measuring equipment
Proposed Training Time: 210 minutes		

Category	Ref	Knowledge Set
QMS-1.6 Measurement, analysis and improvement	QMS-1.6.1	General requirements
	QMS-1.6.2	Monitoring and Measurement
	QMS-1.6.3	Control of nonconforming product
	QMS-1.6.4	Analysis of data
	QMS-1.6.5	Improvement
Proposed Training Time: 150 minutes		
QMS-1.7 Quality Management System Auditing	QMS-1.7.1	Auditing principles
	QMS-1.7.2	Auditing best practices
	QMS-1.7.3	Study cases
Proposed Training Time: 210 minutes		
Exam preparation and sample test/sample questions: 30 minutes		

4.5 Test Specification

The examination will consist of **seven (7)** sections with the following structure:

Category	Description	Exam (%)
1	QMS-1.1 Process approach, Scope, Terms & Definitions	20.0%
2	QMS-1.2 Quality Management System	10.0%
3	QMS-1.3 Management Responsibility	17.5%
4	QMS-1.4 Resource Management	7.5%
5	QMS-1.5 Product Realization	15.0%
6	QMS-1.6 Measurement, analysis and improvement	20.0%
7	QMS-1.7 Quality Management System Auditing	10.0%
	Total	100.0%

5. Recommended Reading

- (i) ISO 9001:2008 Quality Management Systems – Requirements, Switzerland, ISO 2008.
ISO 9000:2005, Quality management systems -- Fundamentals and vocabulary, Switzerland, ISO, 2005
- (ii) ISO 19011, Guidelines for quality and/or environmental management systems auditing.
- (iii) ISO/TR 10013:2001, Guidelines for quality management system documentation.
- (iv) ISO 10012, Measurement management systems — Requirements for measurement processes and measuring equipment.
- (v) ISO/TR 10017, Guidance on statistical techniques for ISO 9001:2000.
- (vi) ISO/IEC Guide 2, Standardization and related activities — General vocabulary.

6. Glossary

Accreditation Body	Assessment organizations that provide certification, testing, and inspection and calibration services. Accreditation by an accreditation body demonstrated competence, impartiality and performance capability of an organization that does audits. Ensures a consistent approach.
Accredited Certification Body	Organization that performs certification audits, commonly referred to as 'professional audit companies' and which has been accredited by an accreditation body.
Availability	Ability of a component or service to perform its required function at a stated instant or over a stated period of time.
Baseline	Snapshot of the state of a service or individual configuration items at a point in time.
Change record	Record containing details of which configuration items are affected and how they are affected by an authorized change.
Code of Practice	A standard that recommends 'good, accepted practice as followed by competent practitioners'.
Compliance	Meeting the requirements in ISO/IEC 9001 (or another national or international standard), as assessed by an internal audit or an organization that is not an accredited certification body or qualified to carry out ISO/IEC 9001 certification audits. Compliance includes 'Self-assessment Audits'.
Document	Information and its supporting medium. Note 1: In this standard, records are distinguished from documents by the fact that they function as evidence of activities, rather than evidence of intentions. Note 2: Examples of documents include policy statements, plans, procedures, service level agreements and contracts.
Incident	Any event which is not part of the standard operation of a service and which causes or may cause an interruption to, or a reduction in, the quality of that service.
Problem	Unknown underlying cause of one or more incidents.
Record	Document stating results achieved or providing evidence of activities performed.
Release	Collection of new and/or changed configuration items which are tested and introduced into the live environment together.
Request for change	Form or screen used to record details of a request for a change to any configuration item within a service or infrastructure.
Service/product provider	The organization aiming to achieve certification according to ISO/IEC 9001.
Specification	A standard that sets out 'detailed requirements', using the prescriptive 'shall', to be satisfied by a product, material process or system.