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Exam Preparation Guide

ISO 45001 Lead Auditor

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The objective of the "PECB Certified ISO 45001 Lead Auditor" exam is to ensure that the candidate has the necessary competence to: perform an occupational health and safety management system (OH&S MS) audit in compliance with ISO 45001 requirements; manage an audit team by applying widely recognized audit principles, procedures, and techniques; and, lastly, plan and carry out internal and external audits as per the guidelines of ISO 19011 and in compliance with the ISO/IEC 17021-1 certification processes.

The ISO 45001 Lead Auditor exam is intended for:

- Auditors interested in performing and leading OH&S MS certification audit
- Managers or consultants interested in advancing their knowledge of the OH&S MS audit process
- Internal auditors and individuals responsible for maintaining conformity to the requirements of ISO 45001
- Technical experts interested in preparing for an OH&S MS audit
- Expert advisors in OH&S

The exam covers the following competency domains:

- **Domain 1:** Fundamental principles and concepts of an occupational health and safety management system (OH&S MS)
- **Domain 2:** Occupational health and safety management system (OH&S MS) requirements
- **Domain 3:** Fundamental audit concepts and principles
- **Domain 4:** Preparing an ISO 45001 audit
- **Domain 5:** Conducting an ISO 45001 audit
- **Domain 6:** Closing an ISO 45001 audit
- **Domain 7:** Managing an ISO 45001 audit program

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The content of the exam is divided as follows:

Domain 1: Fundamental principles and concepts of an occupational health and safety management system (OH&S MS)

Main objective: Ensure that the candidate understands and is able to interpret ISO 45001 principles and concepts

Competencies	Knowledge statements
1. Ability to explain the scope and applicability of ISO 45001	1. Knowledge of the scope and applicability of ISO 45001 in different organizations
2. Ability to identify the legal requirements and other requirements to which the organization must adhere	2. Knowledge of the importance of complying to legal requirements and other requirements as well as different types or requirements which may be applicable to an organization
3. Ability to distinguish between ISO 45001 and other occupational health and safety-related standards	3. Knowledge of the difference and similarities of ISO 45001 with other occupational health and safety-related standards
4. Ability to explain the benefits of ISO 45001	4. Knowledge of the benefits of implementing an OH&S MS based on ISO 45001
5. Ability to explain the connection between organizations, human rights, and labor practices	5. Knowledge of the relationship between organizations, human rights, and labor practices
6. Ability to explain the human rights principles and labor practice principles	6. Knowledge of the definition of human rights principles and labor practice principles, as stated in ISO 26000
7. Ability to explain what a OH&S management system is	7. Knowledge of the OH&S management system definition, as stated in ISO 45001
8. Ability to identify the differences between core terms related to OH&S MS	8. Knowledge of terms and definitions as stated in ISO 45001 as well as differences between those terms
9. Ability to list the common causes of occupational accidents	9. Knowledge of the methodology used to classify the common causes of occupational accidents
10. Ability to explain the hazard and workplace relationship	10. Knowledge of the relationship of hazard and workplace
11. Ability to define what risk-based approach is, and how it is applied in ISO 45001	11. Knowledge of the risk-based approach definition and its application in ISO 45001
12. Ability to define what OH&S objectives are	12. Knowledge of the definition of OH&S objectives, as provided in ISO 45001

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Domain 2: Occupational health and safety management system (OH&S MS) requirements

Main objective: Ensure that the candidate understands, is able to interpret, and identify the requirements for an occupational health and safety management system based on ISO 45001

Competencies	Knowledge statements
1. Ability to understand what comprises a management system	1. Knowledge of the elements that comprise a management system
2. Ability to identify the common elements of ISO management systems that can be integrated	2. Knowledge of the integrated management systems
3. Ability to understand the ISO 45001 requirements and the structure of the standard	3. Knowledge of the requirements and structure of ISO 45001
4. Ability to describe the standard's requirements with regard to the context of the organization, interested parties, and OH&S MS scope (clause 4)	4. Knowledge of the common external and internal issues that affect the context of an organization, interested parties, and requirements for the scope of the OH&S MS
5. Ability to identify the standard's requirements with regard to the top management's leadership and commitment and their role and responsibilities in the OH&S MS, and the importance of worker participation and consultation (clause 5)	5. Knowledge of the requirements for leadership and commitment as well as consultation and participation of workers
6. Ability to understand the requirements with regard to the risks and opportunities, OH&S objectives, and planning to achieve them (clause 6)	6. Knowledge of the requirements with regard to identification of risks and opportunities and setting of OH&S objectives
7. Ability to ensure that sufficient resources are available for the implementation, operation, maintenance, and continual improvement of the OH&S MS (clause 7)	7. Knowledge of the required resources, competences, awareness, communication, and documented information for an effective OH&S MS
8. Ability to understand the operational requirements for hazard elimination and OH&S risk reduction, change management, and procurement as well as the need for emergency preparedness and response (clause 8)	8. Knowledge of the requirements for operational planning and control as well as emergency preparedness and response
9. Ability to identify the requirements and approaches for performance evaluation (clause 9)	9. Knowledge of the approaches, techniques, and programs used for the monitoring, measurement, analysis, evaluation, internal audits, and management reviews
	10. Knowledge of the requirements for nonconformity and corrective actions, continual improvement, and update of the OH&S MS

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10. Ability to understand the requirements for continual improvement of the OH&S MS (clause 10)	

Domain 3: Fundamental audit concepts and principles

Main objective: Ensure that the candidate understands, is able to interpret, and apply the main concepts and principles related to an OH&S MS audit

Competencies	Knowledge statements
1. Ability to understand, explain, and illustrate the application of the audit principles in an OH&S MS audit	1. Knowledge of the main audit concepts and principles as described in ISO 19011
2. "Ability to differentiate first, second, and third party audits"	2. Knowledge of the differences between first, second, and third party audits
3. Ability to identify and judge situations that would discredit the professionalism of the auditor and violate the PECB Code of Ethics	3. Knowledge of the principles of auditing: integrity, fair presentation, due professional care, confidentiality, independence, evidence-based approach, and risk-based approach
4. Ability to identify and judge ethical issues considering the obligations related to the audit client, auditee, law enforcement, and regulatory authorities	4. Knowledge of an auditor's professional responsibility and the PECB Code of Ethics
5. Ability to determine and evaluate the level of materiality and apply the risk-based approach during the different stages of an OH&S MS audit	5. Knowledge of the risk-based approach to an audit and the different types of risks related to audit activities such as inherent risk, control risk, and detection risk
6. Ability to judge the appropriate level of reasonable assurance needed for an OH&S MS audit	6. Knowledge of the concept of materiality and its application to an audit
7. Ability to understand the legal implications related to any irregularities committed by the auditee	7. Knowledge of the concept of reasonable assurance and its application to an audit
	8. Knowledge of the laws and regulations applicable to the auditee and the country it operates in, etc.

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Domain 4: Preparing an ISO 45001 audit

Main objective: Ensure that the candidate is able to prepare an OH&S MS audit

Competencies	Knowledge statements
1. Ability to understand and illustrate the steps and activities to prepare an OH&S MS audit considering the specific context of the audit	1. Knowledge of the main responsibilities of the audit team leader and audit team members
2. Ability to explain and compare evidence types and their characteristics	2. Knowledge of the roles and responsibilities of technical experts
3. Ability to determine and justify the type and amount of evidence required in an OH&S MS audit	3. Knowledge of the audit objectives, audit scope, and audit criteria
4. Ability to understand and explain the roles and responsibilities of the audit team leader, audit team members, and technical experts	4. Knowledge of the difference between an OH&S MS scope and the audit scope
5. Ability to determine and evaluate the level of materiality during the different stages of an OH&S MS audit	5. Knowledge of the factors to take into account during the audit feasibility
6. Ability to determine the audit feasibility	6. Knowledge of the cultural aspects to consider in an audit
7. Ability to determine, evaluate, and confirm the audit objectives, the audit criteria, and the audit scope for an OH&S MS audit	7. Knowledge of the characteristics of terms of the audit engagement and the best practices to establish the initial contact with an auditee
8. Ability to explain, illustrate, and define the characteristics of the terms of the audit engagement and apply the best practices to establish the initial contact with an auditee	8. Knowledge of the audit plan preparation procedure
9. Ability to develop audit working papers and elaborate appropriate audit test plans in an OH&S MS audit	9. Knowledge of the preparation and development of audit working papers
	10. Knowledge of the different types of audit evidence: physical, mathematical, confirmative, technical, analytical, documentary, and verbal
	11. Knowledge of the best practices for the creation of audit test plans

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Domain 5: Conducting an ISO 45001 audit

Main objective: Ensure that the candidate can efficiently conduct an OH&S MS audit

Competencies	Knowledge statements
1. Ability to conduct the stage 1 audit, taking into account the documented information evaluation criteria	1. Knowledge of the objectives and the content of the opening meeting in an audit
2. Ability to organize and conduct an opening meeting	2. Knowledge of the difference between stage 1 audit and stage 2 audit
3. Ability to conduct the stage 2 audit by appropriately following the procedures that this stage entails	3. Knowledge of stage 1 audit requirements, steps, and activities
4. Ability to apply the best practices of communication to collect the appropriate audit evidence	4. Knowledge of the documented information evaluation criteria and ISO 45001 requirements
5. Ability to consider the roles and responsibilities of all the interested parties involved	5. Knowledge of stage 2 audit requirements, steps, and activities
6. Ability to explain, illustrate, and apply evidence collection procedures and tools	6. Knowledge of the best communication practices during an audit
7. Ability to explain, illustrate, and apply the main audit sampling methods	7. Knowledge of the roles and responsibilities of guides and observers during an audit
8. Ability to gather appropriate evidence from the available information during an audit and evaluate it objectively	8. Knowledge of the different conflict resolution techniques
9. Ability to explain, illustrate, and apply the audit evidence approach in an OH&S MS audit	9. Knowledge of the evidence collection procedures and tools such as interview, documented information review, observation, analysis, sampling and technical verification
	10. Knowledge of the evidence analysis techniques: corroboration and evaluation
	11. Knowledge of the main concepts, principles, and evidence collection procedures used in an audit
	12. Knowledge of the advantages and disadvantages of using audit checklists

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Domain 6: Closing an ISO 45001 audit

Main objective: Ensure that the candidate is able to conclude an OH&S MS audit and conduct audit follow-up activities

Competencies	Knowledge statements
1. Ability to explain and apply the evidence evaluation process: drafting audit findings and preparing audit conclusions	1. Knowledge of the evidence evaluation process: to draft audit findings and to prepare audit conclusions
2. Ability to understand, explain, and illustrate the concept of the benefit of the doubt	2. Knowledge of the characteristics and differences between the concepts of conformity, minor nonconformity, major nonconformity, anomaly, and observation
3. Ability to report appropriate audit observations in accordance with audit rules and principles	3. Knowledge of the guidelines and best practices to draft nonconformity reports
4. Ability to conduct quality reviews to audit documentation	4. Knowledge of the guidelines and best practices to draft and report audit observations
5. Ability to draft and present audit conclusions	5. Knowledge of the benefit of the doubt principle and its application in the management system audits
6. Ability to complete audit working documents	6. Knowledge of the guidelines and best practices to complete audit working documents and perform a quality review
7. Ability to organize and conduct a closing meeting	7. Knowledge of the guidelines and best practices to present audit findings and conclusions to the management of an audited organization
8. Ability to write an ISO 45001 audit report and justify the recommendation for certification	8. Knowledge of the possible recommendations that an auditor can issue during the certification audit
9. Ability to conduct the activities following an initial audit, including the evaluation of action plans, audit follow-ups, and surveillance activities	9. Knowledge of the guidelines and best practices to evaluate action plans
	10. Knowledge of audit follow-ups, surveillance audits, and recertification audit requirements, steps, and activities
	11. Knowledge of the conditions for the modification, extension, suspension, or withdrawal of an organization's certification

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Domain 7: Managing an ISO 45001 audit program

Main objective: Ensure that the candidate understands how to establish and manage an OH&S MS audit program

Competencies	Knowledge statements
1. Ability to understand and explain the establishment of an audit program and the application of the PDCA cycle into an audit program	1. Knowledge of the application of the PDCA cycle in the management of an audit program
2. Ability to understand and explain the importance of protecting the integrity, availability, and confidentiality of audit records and the auditors' responsibilities in this regard	2. Knowledge of the requirements, guidelines, and best practices regarding audit resources, procedures, and policies
3. Ability to understand the documented information management process	3. Knowledge of the requirements, guidelines, and best practices regarding the management of audit records
4. Ability to understand the process of evaluating the efficiency of the audit program by monitoring the performance of each auditor and audit team member	4. Knowledge of the management of combined audits
5. Ability to demonstrate the application of the personal attributes and behaviors associated with professional auditors	5. Knowledge of the personal attributes and behaviors of a professional auditor

Based on the above-mentioned domains and their relevance, 12 questions are included in the exam, as summarized in the table below:

		Points per question	Questions that measure comprehension, application, and analysis	Level of understanding (Cognitive/Taxonomy) required	Number of questions per competency domain	% of the exam devoted to each competency domain	Number of points per competency domain	% of points per competency domain
				Questions that measure synthesis and evaluation				
Competency domains	Fundamental principles and concepts of an occupational health and safety management system (OH&S MS)	5	X		2	16.67	10	13.33
		5	X					
	Occupational health and safety management system (OH&S MS) requirements	5	X		2	16.67	10	13.33
		5	X					
	Fundamental audit concepts and principles	5	X		2	16.67	10	13.33
		5	X					
	Preparing an ISO 45001 audit	10	X		1	8.33	10	13.33
	Conducting an ISO 45001 audit	5	X		3	25	20	26.68
		5		X				
		10		X				
	Closing an ISO 45001 audit	5		X	1	8.33	5	6.67
	Managing an ISO 45001 audit program	10		X	1	8.33	10	13.33
	Total points	75						
	Number of questions per level of understanding	8	4					
	% of the exam devoted to each level of understanding (cognitive/taxonomy)	66.67	33.32					

The exam passing score is **70%**.

After successfully passing the exam, candidates will be able to apply for the "PECB Certified ISO 45001 Lead Auditor" credential depending on their level of experience.

General Information on the Exam

Candidates are required to arrive/be present at least 30 minutes before the exam starts. Candidates who arrive late will not be given additional time to compensate for the late arrival and may not be allowed to sit for the exam.

Candidates are required to bring a valid identity card (a national ID card, driver's license, or passport) and show it to the invigilator.

If requested on the day of the exam (paper-based exams), additional time can be provided to candidates taking the exam in a non-native language, as follows:

- 10 additional minutes for Foundation exams
- 20 additional minutes for Manager exams
- 30 additional minutes for Lead exams

PECB Exam Format and Type

1. Paper-based: Exams are provided on paper, where candidates are not allowed to use anything but the exam paper and a pen. The use of electronic devices, such as laptops, tablets, or phones, is not allowed. The exam session is supervised by a PECB approved Invigilator at the location where the Reseller has organized the training course.

2. Online: Exams are provided electronically via the PECB Exams application. The use of electronic devices, such as tablets and cell phones, is not allowed. The exam session is supervised remotely by a PECB Invigilator via the PECB Exams application and an external/integrated camera.

For more detailed information about the online format, please refer to the PECB Online Exam Guide.

PECB exams are available in two types:
1. Essay-type question exam
2. Multiple-choice question exam

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This exam comprises essay-type questions. They are used to determine and evaluate whether a candidate can clearly answer questions related to the defined competency domains. Additionally, problem-solving techniques and arguments that are supported with reasoning and evidence will also be evaluated.

The exam is open book and is not intended to measure memorizing or recalling information. It aims to evaluate candidates' comprehension, analytical skills, and applied knowledge. Therefore, candidates are required to provide logical and convincing answers and explanations in order to demonstrate that they have understood the content and the main concepts of the competency domains.

Since the exam is "open book," candidates are authorized to use the following reference materials:

- A copy of ISO 45001 standard
- Training course materials(accessed through PECB Exams app and/or printed)
- Any personal notes made by the candidate during the training course(accessed through PECB Exams app and/or printed)
- A hard copy dictionary

Any attempts to copy, collude, or otherwise cheat during the exam session will automatically lead to failure of the exam.

PECB exams are available in English and other languages. For the availability of the exam in a particular language, please contact examination@pecb.com.

Note: PECB will progressively transition to multiple-choice exams. They will also be open book and comprise scenario-based questions that will allow PECB to evaluate candidates' knowledge, abilities, and skills to use information in new situations (apply), draw connections among ideas (analyze), and justify a stand or decision (evaluate). All PECB multiple-choice exams have one question and three alternatives, of which only one is correct.

For specific information about exam types, languages available, and other details, visit the List of PECB Exams.

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Receiving the Exam Results

Exam results will be communicated via email. The only possible results are *pass* and *fail;* no specific grade will be included.

- The time span for the communication starts from the exam date and lasts three to eight weeks for essay type exams and two to four weeks for multiple-choice paper-based exams

- For online multiple-choice exams, candidates receive their results instantly

Candidates who successfully complete the exam will be able to apply for one of the credentials of the respective certification scheme.

For candidates who fail the exam, a list of the domains where they have performed poorly will be added to the email to help them prepare better for a retake.

Candidates that disagree with the results may request for a re-evaluation by writing to results@pecb.com within 30 working days of receiving the results. Re-evaluation requests received after 30 days will not be processed. If candidates do not agree with the results of the reevaluation, they have 30 working days from the date when they received the reevaluated exam results to file a complaint through the PECB Ticketing System. Complaints received after 30 days will not be processed.

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Exam Retake Policy

There is no limit on the number of times that a candidate may retake an exam. However, there are certain limitations in terms of the allowed time frames between exam retakes.

- If a candidate does not pass the exam on the 1st attempt, they must wait 15 days from the initial date of the exam for the next attempt (1st retake). Retake fees apply.
  Note: Candidates who have completed the training course but failed the exam are eligible to retake the exam once for free within a 12-month period from the initial date of the exam.
- If a candidate does not pass the exam on the 2nd attempt, they must wait three months after the initial date of the exam for the next attempt (2nd retake). Retake fees apply.
  Note: For candidates that fail the exam in the 2nd retake, PECB recommends them to attend a training course in order to be better prepared for the exam.
- If a candidate does not pass the exam on the 3rd attempt, they must wait six months after the initial date of the exam for the next attempt (3rd retake). Retake fees apply.
- After the 4th attempt, the waiting period for further retake exams is 12 months from the date of the last attempt. Retake fees apply.

To arrange exam retakes (date, time, place, costs), candidates need to contact the PECB Reseller/Distributor who has initially organized the session.

Reschedule the Exam

For any changes with regard to the exam date, time, location, or other details, please contact examination@pecb.com.

Closing a Case

If candidates do not apply for certification within three years, their case will be closed. Even though the certification period expires, candidates have the right to reopen their case. However, PECB will no longer be responsible for any changes regarding the conditions, standards, policies, and candidate handbook that were applicable before the case was closed. A candidate requesting their case to reopen must do so in writing and pay the required fee.

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Exam Security

A significant component of a successful and respected professional certification credential is maintaining the security and confidentiality of the exam. PECB relies upon the ethical behavior of certificate holders and applicants to maintain the security and confidentiality of PECB exams. Any disclosure of information about the content of PECB exams indicates violation of PECB's Code of Ethics. PECB will take action against individuals who violate PECB Policies and the Code of Ethics. These actions include permanently barring individuals from pursuing PECB credentials and revoking the awarded credentials. PECB will also pursue legal action against individuals or organizations who infringe upon its copyrights, proprietary rights, and intellectual property.

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Sample Exam Questions

Question 1: You have received a corrective action plan for review. As such, evaluate the effectiveness of the proposed corrective actions and explain whether you agree with them or not. If you do not agree with them, propose a more adequate corrective action.

Nonconformity 1: Due to a lack of lifting equipment, employees were asked to lift heavy items in the workplace, causing shoulder and back injuries. A supervisor stated that they made a request to top management for purchasing new lifting equipment but was told that nothing could be done until the next management review.

Corrective action plan: Purchase new lifting and material handling equipment (Timeframe: immediately).

Possible answer:
I do not agree with the proposed corrective action plan. While the purchasing of the equipment can be considered a correction, it does not go as far as dealing with the root cause of the nonconformity. Apart from the lack of equipment, the nonconformity has also revealed a lack of top management commitment which must be dealt with. Therefore, the top management should also review their commitments to OH&S MS, must establish the necessary procedures to identify and provide the resources required for a safer workplace in time, and should review their criteria for issues that should prompt a management review.

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Question 2: Prepare an audit test plan by selecting at least three appropriate audit procedures to validate conformity to ISO 45001, clause 8.2 *Emergency preparedness and response*. Mark "N/A" for the procedures that do not apply.

Possible answer:

Audit test plan	
Observation	*Observe the organization's building, equipment, and safety measures to validate the establishment of a process to prepare for, and respond to potential emergency situations.*
Interview	*Interview several workers to validate whether they are aware of the emergency preparedness and response plan, its contents, and the procedures to be followed during an emergency.*
Documented information review	*Determine whether the organization is maintaining and retaining the necessary documented information on the processes and plans for responding to a potential emergency situation.*
Technical verification	*Perform technical tests on the equipment that are designated for usage during an emergency (alarm system, communication devices, back-up technology, etc.).*
Analysis	*N/A*

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