

CPRE® Question Bank

The essential guide to succeed in Certified Professional in Requirements Engineering examination

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Preface and Introduction

As the book title suggests, this book is a guidebook for the aspirants of the CPRE examination from IREB, Germany.

We value your time and hence the book is designed to be extremely specific - Help you pass the certification examination with least possible effort.

This book is authored by qualified CPRE trainers who have helped many other participants clear the CPRE examination in the very first attempt. They are also trainers for CPRE preparations in both corporate and open-house workshops and have trained participants across the world - USA, Australia, Middle East, South East Asia, Europe and Africa.

The book will soon be followed by an exhaustive question bank and audio book to further assist participants.

Feedbacks and suggestions on the book



We will be glad and thankful if you can share your feedbacks and suggestions on the book. Please your feedbacks and suggestions to LN Mishra@AdaptiveProcesses.com

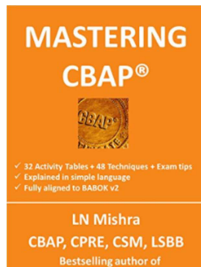
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About the Author



LN Mishra (LN) has 22 years of professional experience in software product development, requirements analysis, business analysis, governance, risk and compliance management (CMMI, ISO9001, ISO27001, HIPAA and Six-Sigma).



LN is a practicing requirements engineer and business analyst for more than 15 years. He was involved in multiple multi-country large ERP implementation projects. He currently consults in development of 2 large systems – one of the largest paint companies in the world to develop



their next generation color management system and development of a GRC system. He is also the product manager for an enterprise Governance, Risk and Compliance management system (GRCPeak) which is operational in multiple client places.



He was involved in one of the world's change management program in PricewaterhouseCoopers, a leading management consulting firm, in one of the largest privatization effort in India for a public sector utility agency. LN has



conducted more than 100 workshops, both public and in house in the areas of Business Analysis, Requirements Management, Agile Project Management, software Project Management, Six Sigma, CMM, ISO 9001, and ISO 27001. He has also guided 30+ six sigma green belt projects in iGate, MACH and Akzo



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Nobel.

LN holds a Post Graduate Diploma in Management (PGDM) from IIM Ahmedabad, the top-most business management school in India and Bachelor in Engineering (Honours) in Electronics and Telecommunication from University College of Engineering, Burla, India.

Major Awards/Recognitions:

- ✓ Certified Requirements Engineering Professional (CPRE) from IREB, Germany
- ✓ Certified Business Analyst Professional (CBAP) from IIBA, Canada.
- ✓ Certified Project Management Professional (PMP) from PMI, USA
- ✓ Certified Scrum Master from Good Agile, USA
- ✓ World Topper Certified software Quality Analyst (CSQA), 2000
- ✓ Certified Lead Auditor for ISO 9001, ISO 27001, ISO 20000 and BS 25999

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Clients for whom LN has consulted and mentored



LN lives with his wife, Ananya, son, Siddharth and daughter, Saianshee in Bangalore, the IT capital of India.

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Getting certified
or not will
determine if your
prospective
employer will
call you for an
interview or not.

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Introduction

What and Why of CPRE



CPRE stands for Certified Professional in Requirements Engineering, a certification provided by International requirements Engineering Board (IREB), Germany (www.IREB.org). This is the most widely acknowledged certification for requirements engineers. There are more than 20000 requirements engineering professionals certified in CPRE Foundation Level examination world-wide.

Following are some of the benefits of becoming a CPRE

- ✓ Be recognized for your competency in requirements engineering.
- ✓ Requirements engineering is a growing career opportunity for IT professionals.
- ✓ People with domain experience can join IT sector by becoming requirements engineers.
- ✓ Better job prospects.
- ✓ Better salary.

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What is IREB?



International requirements Engineering Board (IREB) was founded in Germany in to support the requirements engineering community by:

- ✓ Creating, and developing awareness, and recognition of the value, and contribution of the requirements engineers.
- ✓ Providing a forum for knowledge sharing, and contribution to the requirements engineering profession.
- ✓ Publicly recognizing, and certifying qualified practitioners through an internationally acknowledged certification programs such as CPRE - foundation Level, CPRE-Advanced Level and CPRE-Expert Level.

Prerequisite for CPRE



The only formal prerequisite for admission to the Foundation Level Exam is having a valid identity card or passport. Please take your ID document to the exam for proof of identity. For answering the exam questions correctly, you need to know the content of the defined Foundation Level syllabus.

Taking a training course is not a requirement for admission to the test but is recommended by the IREB.

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Preparation



One can prepare for the exam

- By attending a CPRE training with a training provider. The training should take at least three days and be conducted by a training provider recognized by IREB.
- By preparing individually in self-study.
- By downloading the practice exam from IREB.org. The practice examination contains 34 questions in the same format as the live examination. Additionally to the questionnaire the download contains solutions and correction aids as well.
- By having a look at the exam regulations for the Foundation Level. Please notice the regulations regarding negative scoring for incorrect answers!

Certification examination



The exam takes 75 minutes. In this time, one has to answer 45 multiple choice questions. The questions are of differing difficulty and therefore assigned differing amounts of points. The exam is closed-book, i.e. no materials are allowed to be used. To pass the exam, one must achieve at least than 60% of the total score possible. The exam is conducted by a licensed certification body. The

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exam can be taken in Chinese (Mandarin), Dutch, English, French, German, Spanish and Portuguese (Brazil).

Examination results



Exam results are checked by the certification body. Results are dispatched to the personal address stated on the application. If one has passed the exam, one will receive the certificate together with the results. If one takes the exam online, one gets the results right after the examination. The certificate is delivered via post. The certificates achieved via online exam are dispatched within the same period of time the results of conventional exams are sent.

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1. Introduction to requirements engineering

- 1 To appear for CPRE- Foundation level examination, one must be?
 - a. A practicing requirements engineer for 3 years.
 - b. Must be a graduate.
 - c. Must have completed a course in requirements engineering.
 - d. None of the above.

- 2 To pass CPRE- Foundation level examination, one must score
 - a. 50%
 - b. 60%
 - c. 70%
 - d. 75%.

- 3 CPRE- Foundation level examination has
 - a. Negative marking
 - b. No negative marking
 - c. Only multiple choice questions
 - d. Only descriptive questions

- 4 Which of the following statements are true for “functional requirements?”

True / False	Statements
	Application should be able to support 100 concurrent users.
	Application development shall follow agile development approach.

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	System shall be able to capture necessary information about project risks.
	Once a risk is created, it can be assigned to a project team member.

5 Which of the following statements are true for “constraints” ?

True / False	Statements
	System shall be able to capture necessary information about project risks.
	1 st release of the application must be completed within 3 months.
	Application should process any report within 15 minutes.
	Application development shall follow agile development approach.

6 Among following qualities, which are essential for requirements engineers?

True / False	Qualities
	Empathy
	Analytic thinking
	Public speaking
	Conflict resolution

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- 7 Among following which is NOT part of major activities for requirements engineer:
- Elicitation
 - Documentation
 - Validation
 - Promote agile method
- 8 Among following which is objective of Elicitation?
- Gather requirements
 - Document requirements
 - Validate requirements
 - None of the above
- 9 Among following which is NOT an objective of validation?
- Ensure requirements meet business needs
 - Ensure requirements meet requirements quality criteria
 - To document stated requirements
 - Promote agile method
- 10 Among following which is a quality requirement?
- Application should be able to support 100 concurrent users.
 - Application development shall follow agile development approach.
 - System shall be able to capture necessary information about project risks.
 - Once a risk is created, it can be assigned to a project team member.

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- 11 Peter is the requirements engineer for a project and needs to identify the stakeholder that will be responsible for authorizing the actions needed in order to meet the identified business need. Which stakeholder does Peter need to identify?
- a. Sponsor
 - b. Customer
 - c. User
 - d. Project Manager
- 12 Which of the following possible project requirements are considered functional business requirements?
- a. New data that supports changes to any business process will be included in the new system.
 - b. New data that will be added shall be accessible directly from the My SQL database.
 - c. Data for the system changes will be retained for 3 years.
 - d. Data for the system changes will be backed up daily and one copy stored off-site.
- 13 Techniques used to specify requirements include all of the following EXCEPT
- a. Business rules analysis.
 - b. Prototyping.
 - c. Scenarios and use cases.
 - d. Functional composition.

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- 14 Which type of requirement best describes the behavior and information that the solution will manage, including a specific system action or response?
- Business Requirements.
 - Stakeholder Requirements.
 - Functional Requirements.
 - Non-functional Requirements.
- 15 Oral communication may include?
- Active listening, unemotional and other non-verbal cues.
 - Active listening, expressed documented ideas.
 - Active listening, emotional and other non-verbal cues.
 - Active listening, verbal assaults.
- 16 Non-functional requirements, assumptions and constraints do _____?
- Exclude environmental requirements.
 - Should not pose constraints on the solution.
 - Do not directly relate to the behavior or functionality of the solution.
 - Should only be considered after Requirements Elicitation is complete and functional requirements are defined.
- 17 As an RE you have been effective in reducing resistance to necessary changes. As such, which underlying competency have you most demonstrated?
- Confidence-building.
 - Teamwork.
 - Leadership and influencing.
 - Solution knowledge.

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- 18 Which of the following stakeholders will be more focused on design of the solution?
- Project manager.
 - Implementation SME.
 - Domain SME.
 - Sponsor.
- 19 When working on assessing potential solutions and allocating requirements, REs needs to interact frequently with people such as designers, architects, developers, etc. The implementation SMEs are NOT typically responsible for which parts of the solution?
- Provides information on technical constraints that may limit possible solutions.
 - Supplies inputs on the skills and capabilities needed to successfully run the new solution and may have suggestions about the set of requirements to be allocated to a solution component or to a release.
 - Manage project effort and cost
 - Needs to be informed of when and where requirements are allocated and helps with evaluating the design of software applications that are easier to understand and use.

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- 20 Your project seems to have many new requirements being discovered during first 2 months of implementation. What is the best course of action you could recommend?
- a. Change the business analysis approach from the plan-driven approach to a change-driven approach.
 - b. Suspend development activities until you can understand the impact of interface requirements.
 - c. Advise the remote system users that process re-engineering should be postponed until after the current project has been completed.
 - d. Estimate the cost of re-work due to anticipated Change Requests.

2. Understand System Context

- 1 System context defines
 - a. Aspects that affect the system.
 - b. Aspects that do not affect the system.
 - c. People who use the system.
 - d. None of the above.

- 2 Indicate 3 aspects that can be included in system context
 - a. People who use the system.
 - b. Documents used for the system.
 - c. Other systems that interact with the system.
 - d. Other systems that do not interact with the system.

- 3 System context
 - a. Separates the system to be developed from its environment
 - b. Separates useful aspects of the environment to non-useful aspects
 - c. Both of the above
 - d. None of the above

- 4 System boundary
 - a. Separates features that can be modified against those which can't be
 - b. Separates features that cannot be modified against those which can't be
 - c. Both of the above
 - d. None of the above

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- 5 What are 2 best modeling techniques to capture system context?
- Context diagram
 - State chart diagram
 - Data flow diagram
 - Sequence diagram.
- 6 The system that provides data is known as _____ and the system that receives data is known as _____.
- Sink and Source
 - Source and Sink
 - Starting point and End point
 - None of the above
- 7 The system that stores data is known as _____.
- Sink and Source
 - Source and Sink
 - Data store
 - None of the above
- 8 While eliciting requirements, you find that local taxes may be applicable. This will be part of
- System context
 - System boundary
 - Gray zone
 - Irrelevant environment