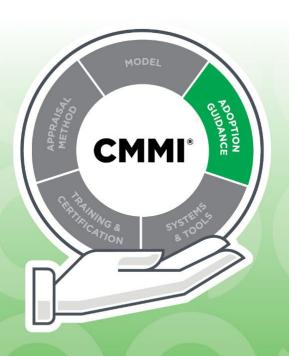


CMMI Adoption Guide for CMMI Credentials



#### **CMMI Adoption Guide for CMMI Credentials**

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#### **Document Change History**

Version	Date	Description
1.0.00.01	28 February 2025	<ul> <li>Patch Release</li> <li>Revisions made to incorporate CMMI Professional Exam Policy updates and Instructor feedback.</li> <li>Updated copyright and company information to CMMI Institute, LLC</li> </ul>
1.0	13 September 2024	Initial Release

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# **Introduction**

The purpose of this **Adoption Guide for CMMI®** Credentials is to provide CMMI students and certification Candidates with technical information and references to prepare for CMMI courses and to prepare and study for CMMI exams and CMMI observations. There are five steps suggested by the CMMI credential process:

- Step 1: Determine desired certifications
- Step 2: Identify certification pathways
- Step 3: Complete training courses
- Step 4: Pass required exams and/or observation
- Step 5: Use your well-earned CMMI credentials to provide guidance to your organization's efforts, leading to measurable results

This document includes the following sections related to CMMI adoption guidance.

- Training Courses: The Organizational Capability curriculum has training courses at three distinct suite levels: 1. Intro/Building; 2. Advanced/Advancing; and 3. Expert/Mastering
- Certification Credentials: CMMI certifications include Associate, Practitioner, Professional, Instructor, Lead Appraiser, and Appraisal Team Member (ATM)
- Exam Preparation: Technical information and references are provided for each CMMI certification.
- Observation: Qualified Candidates undergo an observation to become either a Certified CMMI Lead Appraiser or Certified CMMI Instructor

For more information on how to get started with adopting the CMMI refer to the <u>CMMI Adoption</u> Guidance.

# **Course Curriculum**

#### **Course Overview**

The CMMI curriculum and certification pathways are listed below in <u>Figure 1. CMMI Curriculum and Certification Pathways</u>. The pathways are designed for individuals to build, advance, and master their capability. Each step in the pathway builds upon the previous step and has certification exams to help ascertain comprehension prior to moving to the next suite level.



**Figure 1. CMMI Curriculum and Certification Pathways** 

**CMMI Curriculum:** The CMMI curriculum includes training courses at three distinct suite levels. A student must complete the previous course to achieve the next course or certification. For a full list of prerequisites, visit the specific training course page at

cmmiinstitute.com/training.

**Courses:** ISACA offers three different suite levels of courses:

- Building Organizational Capability (Introductory CMMI)
- Advancing Organizational Capability (Advanced CMMI)
- Mastering Organizational Capability (Expert CMMI)

**Course Delivery:** Official courses are registered with ISACA and are offered either by Certified CMMI Instructors in our Partner Community or by ISACA.

**Course Format:** All ISACA CMMI courses are delivered either as Virtual Instructor-Led Training (VILT) or Instructor-Led (ILT) Training. Three ISACA CMMI courses (*Achieving High Maturity*, *CMMI Instructor Training*, and *CMMI Lead Appraiser Training*) are delivered in a hybrid format which includes a precourse elearning prior to the VILT or ILT session. When precourse work is required, failure to submit or achieve the precourse cut score results in automatic removal from the course. All course attendees are expected to actively participate in discussions and activities. In some courses, participation is graded.

**Virtual Instructor-Led Training (VILT) Guidance:** Students taking a VILT course are required to always be on camera during the course delivery. Students should verify their surroundings are conducive to an on-camera class and free from excessive noise and distractions. In addition, prior to the class date, students should verify their internet bandwidth and computer system are sufficient to attend the course. This is typically accomplished through an Orientation Session.

### **Course Preparation**

Refer to <u>Figure 2. Organizational Capability: Course Information</u> for details on each of the course suite level options.

- Building Organizational Capability Course Suite: Courses at the Building Organizational Capability level usually do not have any required precourse work. The best way to prepare for this level of courses is to ensure that you have access to your student course materials and access to the CMMI Model Viewer. Although prework is not required, many students find it beneficial to review the Overview and Appendices in the CMMI Model Viewer prior to attending their live course. Once students successfully complete the Building Organizational Capability or Foundations of Capability courses, they are eligible to continue through the pathway and take the Practitioner or Associate certification exam.
- Advancing Organizational Capability Course Suite: Courses at the Advancing Organizational Capability level require experience and necessary knowledge prior to attending the live course. Students should continue to study and apply what they have learned in previous courses prior to attending a new course. All Advancing Organizational Capability courses have required precourse assignments that must be completed prior to attending the live course. Students receive the precourse assignments at least 8 weeks prior to the live course. Once students successfully complete the *Applying CMMI* course, they are eligible to continue through the pathway and take the CMMI Professional exam.
- Mastering Organizational Capability Course Suite: Courses at the Mastering Organizational Capability level build on previous courses and consider the additional required experience and necessary knowledge prerequisites. Students should continue to study and apply what they have learned in previous courses prior to attending a new course. All Mastering Organizational Capability courses have precourse required reading and assignments that must be completed prior to attending the live course. Students receive precourse assignments at least 8 weeks prior to the live course. Students must successfully complete precourse activities to attend the live course session. Students who submit unsatisfactory work are removed from the live course session and may reschedule after they have gained additional knowledge and experience. Once students successfully complete the Mastering Organizational Capability course, they are eligible to continue through the pathway and schedule an observation activity.

Figure 2. Organizational Capability: Course Information

Suite Level	Courses	Days <sup>1</sup>	Course Prerequisite	<b>Certification</b> <b>Prerequisite</b>	Application Prerequisite	Precourse Work	Course Pass Requirement	Partner Delivery	ISACA Delivery
	Building Organiza- tional Capability	4	None	None	None	None	Full Attendance	х	Х
	Foundations of Capability	2	None	None	None	None	Full Attendance	Х	Х
Building	Building Develop- ment Excellence	1	Foundations of Capability	None	None	None	Full Attendance	Х	Х
B	Building Service Excellence	1	Foundations of Capability	None	None	None	Full Attendance	Х	Х
	High Maturity Concepts	1	Building Organizational Capability, Building Development and/or Service Excellence	None	None	None	Full Attendance	Х	Х
Advancing	Applying CMMI	5	Building Organizational Capability & High Maturity Concepts	Practi- tioner	Yes <sup>2</sup>	Yes	75%³	-	Х
Adva	Achieving High Maturity	4	Building Organizational Capability & High Maturity Concepts	Practi- tioner	None	Yes	75%³	-	Х
Mastering	CMMI Instructor Training	4	Applying CMMI	Profes- sional	Yes <sup>2</sup>	Yes	75%³	-	Х
Mast	CMMI Lead Appraiser Training	6	Applying CMMI	Profes- sional	Yes <sup>2</sup>	Yes	75%³	-	Х

<sup>&</sup>lt;sup>1</sup> Days: Reflects course design and typical days of delivery. Delivery can be tailored to allow for shorter class time spread out over more days, minimum instructional hours must still be met.

**Application:** An application is required for several courses as there are experience requirements and prerequisites that must be verified. These include *Applying CMMI*, *CMMI Lead Appraiser Training*, and *CMMI Instructor Training*. Training and experience requirements must be met prior to applying. Once a student has an approved application, course registration can be completed.

**Sponsorship:** Students must be sponsored by a Partner Organization to be eligible for courses at Mastering Organizational Capability Course Suite Level. Students must have served as an Appraisal Team Member (ATM) on two registered appraisals in the CMMI Appraisal System (CAS) within 48 months of the course start date.

<sup>&</sup>lt;sup>2</sup> Application Prerequisite: Specific experience is required to apply; experience requirements are available at cmmiinstitute.com/learning/training

<sup>&</sup>lt;sup>3</sup> Course pass requirements include completing all precourse assignments, homework, and obtaining a 75% overall evaluation score on mastery of learner objectives

**After Course Completion:** Refer to <u>Figure 3. Organizational Capability: Pathway Next Steps</u> for Pathway Next Steps.

Figure 3. Organizational Capability: Pathway Next Steps

Suite Level	Course Completed	Next Certification Steps	Next Pathway Course Option(s)
	Foundations of Capability	Pass CMMI Associate Exam	Building Development Excellence or Building Services Excellence
Building Develop- ment Excellence		None	High Maturity Concepts
Building	Building Service Excellence	None	High Maturity Concepts
В	Building Organiza- tional Capability	Pass CMMI Practitioner Exam	High Maturity Concepts
	High Maturity Concepts	None	Achieving High Maturity (only for Building Organizational Capability Pathway)
ing	Applying CMMI	<ul> <li>Schedule CMMI Professional Exam proctored session</li> <li>Pass CMMI Professional Exam</li> </ul>	CMMI Instructor Training or CMMI Lead Appraiser Training
Achieving High Maturity		Application for CMMI High Maturity Lead Appraiser (HMLA) certification (If already a Certified CMMI Lead Appraiser)	CMMI Lead Appraiser Training
ring	CMMI Instructor Training	CMMI Instructor Observation	None
Mastering	CMMI Lead Appraiser Training	CMMI Lead Appraiser Observation	Achieving High Maturity (If looking to enter the CMMI High Maturity Lead Appraiser pathway)

# **Credentials**

#### **Overview**

ISACA CMMI Credentials prepare individuals to provide guidance to their organization's efforts, leading to measurable results. Whether an individual is just getting started with CMMI or have decades of experience, an ISACA CMMI Credential moves them along their career path.

This section includes information about the following certifications:

- CMMI Associate Certification
- CMMI Practitioner Certification
- Appraisal Team Members (ATM)
- CMMI Professional Certification
- CMMI Instructor Certification
- CMMI Lead Appraiser Certification

**Note:** The more advanced CMMI High Maturity Lead Appraiser (HMLA) Certification is not covered in this credentialing guide as the intention of this guide is to introduce users to the CMMI certification pathway. Refer to the CMMI Certification – Certified CMMI HMLA Policy for more information.

#### **CMMI Associate Certification**

The CMMI Associate certification helps individuals committed to excellence in performance improvement achieve professional career growth and advancement.

Certified CMMI Associates can:

- Connect the CMMI model with business value
- Describe the components of CMMI
- Use the CMMI model as a tool for improving performance
- Understand the value of a CMMI appraisal

**Prerequisites:** To take the Certified CMMI Associate Exam, an individual must complete the *Foundations of Capability* prerequisite course.

**Note:** Some historical course offerings may make an individual eligible to take the CMMI Associate Exam; for more information contact <a href="mailto:support.isaca.org">support.isaca.org</a>.

**Requirements:** The CMMI Associate certification designation is awarded to individuals who have met the following requirements:

- Achieve a passing score on the CMMI Associate Exam
- Adhere to the Code of Professional Conduct (COPC)
- Adhere to all relevant CMMI policies

**Maintenance:** To renew a Certified CMMI Associate an individual must retake and pass the CMMI Associate Exam every three years.

For more information, refer to the CMMI Certification – Certified CMMI Associate Policy.

#### **CMMI Practitioner Certification**

The CMMI Practitioner certification helps individuals develop a knowledge of all CMMI domains to assess, improve, and sustain process capability in different organizational contexts to become a performance improvement champion.

Certified CMMI Practitioners can:

- Connect the CMMI model with business value
- Describe the components of CMMI
- Use the CMMI model as a tool for improving performance
- Use the various CMMI domains effectively to assess, improve, and sustain process capability in different organizational contexts
- Understand the value of a CMMI appraisal
- Participate as an Appraisal Team Member (ATM) on any domain appraisal

**Prerequisites:** To take the Certified CMMI Practitioner Exam, an individual must complete the *Building Organizational Capability* prerequisite course.

**Requirements:** The CMMI Practitioner certification designation is awarded to individuals who have met the following requirements:

- Achieve a passing score on the CMMI Practitioner Exam
- Adhere to the Code of Professional Ethics
- Adhere to all relevant CMMI policies

**Maintenance:** To renew a Certified CMMI Practitioner an individual must retake and pass the CMMI Practitioner Exam every three years.

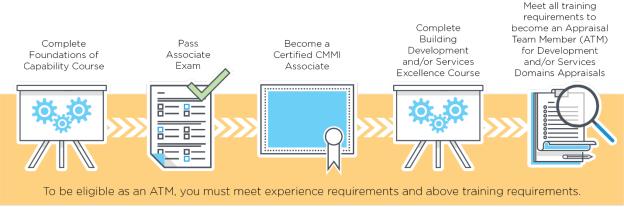
For more information refer to the CMMI Certification – Certified CMMI Practitioner Policy.

## **Appraisal Team Members (ATM)**

Although an Appraisal Team Member (ATM) is not a formal certification it is an appraisal role that requires specific training, certification, and experience. The level on which the student enters the learning pathway determines next steps for an individual and what types of appraisals for which they may be eligible to serve on as an ATM. Individuals starting in the pathway with the *Foundations of Capability* training course are only eligible to participate as an ATM on a Development or Services Domain Appraisals described in <u>Figure 4. ATM Requirements for Development or Service Appraisals Only</u>, individuals starting the pathway with the *Building Organizational Capability* training course are eligible to participate as an ATM on an appraisal for any domain in scope described in <u>Figure 5. ATM Requirements (All Domains)</u>. Additional requirements to serve as an ATM on a High Maturity appraisal are described in <u>Figure 6. ATM Requirements for High Maturity for Development or Service Appraisals Only</u> and <u>Figure 7. ATM Requirements for High Maturity (All Domains)</u>.

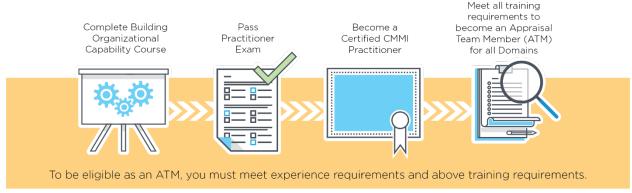
Refer to CMMI Appraisal - ATM Eligibility Policy for more information.

Figure 4. ATM Requirements for Development or Service Appraisals Only



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Figure 5. ATM Requirements (All Domains)



CMMI148AV4 © 2023 ISACA

Figure 6. ATM Requirements for High Maturity for Development or Service Appraisals Only

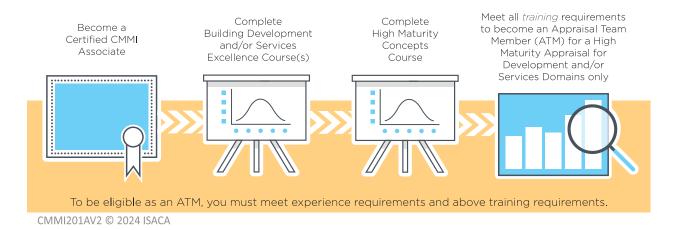
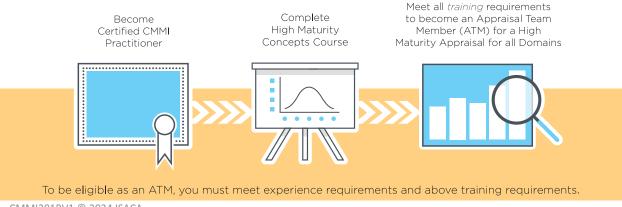


Figure 7. ATM Requirements for High Maturity (All Domains)



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#### **CMMI Professional Certification**

Designed for experienced process, performance, and quality professionals, this certification helps individuals elevate and maintain the necessary skills in strategically targeted areas deemed most critical to organizations.

In conjunction with professional experience, Certified CMMI Professionals have abilities validated to:

- Provide organizational roadmaps for lasting elevated performance
- Coach team members on how to improve performance
- Lead ongoing organizational change efforts
- Establish a culture of continuous improvement

**Prerequisites:** Training; becoming a Certified CMMI Professional involves passing <u>Applying</u> <u>CMMI</u>, the prerequisite training.

**Experience Requirements:** CMMI Professional certification Candidates must meet the stated experience requirements to become certified. 3-5+ years of professional experience is required. For detailed experience requirements, refer to cmmiinstitute.com/learning/certifications/professional.

**Requirements:** The CMMI Professional certification designation is awarded to individuals who have met the following requirements:

- Demonstrate the required work experience
- Achieve a passing score on the CMMI Professional exam
- Adhere to the <u>Code of Professional Conduct (COPC)</u>
- Adhere to all relevant CMMI policies

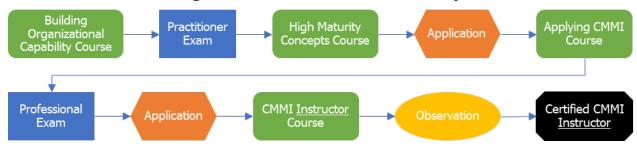
**Maintenance:** To renew the CMMI Professional certification an individual must retake and pass the exam every three years before their validity period ends.

For more information on the CMMI Professional certification maintenance refer to the <u>CMMI Certification – Certified CMMI Professional Policy</u>.

#### **CMMI Instructor Certification**

Becoming a Certified CMMI Instructor requires a commitment to ongoing professional development to maintain a high proficiency and skill in the practice. Refer to <a href="Figure 8. CMMI">Figure 8. CMMI</a> <a href="Instructor Pathway">Instructor Pathway</a> for pathway details.

**Figure 8. CMMI Instructor Pathway** 



#### Certified CMMI Instructors can:

- Use best practice outcome-based instructional techniques to effectively support student mastery of CMMI course objectives
- Use or tailor CMMI course training materials to plan and teach CMMI courses

**Prerequisites:** The experience and training course prerequisites are as follows:

- Successfully obtain the CMMI Professional Certification
- One year of experience presenting information (procedural and conceptual) in a clear, and engaging manner
- 8 years of domain experience in a primary view (Development or Services)
- Appraisal Experience: Participate as an ATM on at least 2 appraisals in the last 24 months from the scheduled *CMMI Instructor Training* course date
- English language fluency
- Complete the *CMMI Instructor Training* course

**Requirements:** Candidates must schedule and complete an observation:

- Students receive observation criteria during the CMMI Instructor Training course
- Candidate and Partner organization must be in good standing
- Candidate must demonstrate the ability to deliver a course according to the observation quidelines
- Upon successful completion of the observation, certification is received
- Refer to <u>Observation Guidance</u> below and the <u>CMMI Certification Course Observation</u> <u>Policy</u> for more information on observation requirements and completion

**Maintenance:** To maintain the CMMI Instructor certification, an individual must earn Continuing Professional Education (CPE) credits and submit for review every three years. For more information on certification maintenance, refer to the <a href="CMMI Certification - Certified CMMI">CMMI Certification - Certified CMMI</a> Lead Appraiser and Instructor Renewal Policy.

## **CMMI Lead Appraiser Certification**

Becoming a Certified CMMI Lead Appraiser requires commitment to ongoing professional development to maintain a high proficiency and skill in the practice. The *Lead Appraiser Training (LAT)* course provides the critical training necessary for qualified individuals to continue their pathway to become a Certified CMMI Lead Appraiser. Refer to <a href="Figure 9">Figure 9</a>. CMMI Lead Appraiser Pathway for pathway details.

Building High Maturity Applying CMMI Practitioner Organizational Application Exam Concepts Course . Course Capability Course Professional Certified CMMI **Application** CMMI LAT Course Lead Appraiser Exam

Figure 9. CMMI Lead Appraiser Pathway

#### CMMI Lead Appraisers can:

- Understand how to plan and prepare, conduct, and report an appraisal using the <u>CMMI</u> Method Definition Document (MDD)
- Understand CMMI appraisal quality and ethics standards for improving and maintaining the reliability of the CMMI appraisal method
- Describe how CMMI appraisals are used along with the CMMI model to evaluate and improve the business performance of an organization

**Prerequisites:** The experience and training course prerequisites are as follows:

- Successfully obtain the CMMI Professional Certification
- One year of experience presenting information (procedural and conceptual) in a clear, and engaging manner
- 8 years of domain experience in a primary view (Development or Services)
- Appraisal Experience: Participate as an ATM on at least 2 appraisals in the last 24 months from the scheduled Lead Appraiser Training date
- English language fluency
- Complete the <u>Lead Appraiser Training</u> course

Requirements: Candidates must schedule and complete an observation

- Students receive observation criteria during Lead Appraiser Training
- Candidate and Partner organization must be in good standing
- Demonstrate ability to deliver an appraisal according to the MDD and observation guidelines
- Refer to the <u>Observation Guidance</u> section below and the <u>CMMI Certification Benchmark</u> Appraisal Observation Policy for more information

**Maintenance:** To maintain the certification, an individual must earn Continuing Professional Education (CPE) credits and submit for review every three years. For more information on certification maintenance refer to the <a href="MMI Certification - Certified CMMI Lead Appraiser and Instructor Renewal Policy">CMMI Certification - Certified CMMI Lead Appraiser and Instructor Renewal Policy</a>.

# **Exam Information**

#### **General Exam Information**

- Description of CMMI Exams: The CMMI Exam Writer Working Groups oversee the
  development of CMMI exams and ensure the currency of its content. Questions for the
  CMMI exams are developed through a multitiered process designed to enhance the ultimate
  quality of the exam. The purpose of the exam is to evaluate a Candidate's knowledge and
  experience.
- Successful Completion of CMMI Exams: CMMI Exams are open to all individuals who have achieved the prerequisite training. Exam Candidates are not certified until they successfully complete the exam and receive approval from ISACA.

#### **About this Guidance**

The purpose of this section is to provide CMMI exam Candidates with technical information and references to prepare and study for a CMMI exam.

DISCLAIMER: No representations or warranties are made by ISACA regarding these or other ISACA publications that ensure Candidates pass a CMMI exam. This publication was produced independently of any CMMI Exam Working Groups, which have no responsibility for the content of this guidance.

Copies of the CMMI exams are not released to the public. The example exam questions in this guidance are designed to provide further clarity to the content presented in this guidance and to depict the type of questions typically found on an exam. The CMMI exams are a knowledge-based, comprehension, and application exams. Simply reading the reference material in this guidance does not properly prepare Candidates for the exam. Sample example exam questions are included for guidance only. An individual's scoring results do not solely indicate future individual exam success.

NOTE: This guidance is one source of preparation for the exam and should not be the only source, nor should it be viewed as a comprehensive collection of all information and knowledge required to pass the exam. No single publication offers such coverage and detail.

An exam Candidate who has little or no knowledge and comprehension with respect to any topics encountered in this guidance should study the CMMI model and consider taking additional training. The exam is composed of questions testing the Candidate's knowledge, comprehension, and ability to apply and analyze concepts.

This section includes the following:

- Preparing for the CMMI Associate and CMMI Practitioner Exam
- Exam Guidance Overview
- CMMI Associate Exam: Overview, Content Areas, Sample
- CMMI Practitioner Exam: Overview, Content Areas, Sample
- CMMI Professional Exam: Overview, Content Areas, Sample

## **Preparing for the CMMI Associate and CMMI Practitioner Exams**

Model Structure: Refer to course materials and review the CMMI model, overview, and Appendices A, B, and E. At the highest level, the CMMI model is a container of Practice Areas (PAs) and composed of five components.

Model Scope: Both exams cover the CMMI model including Categories, Capability Areas, and Practice Areas. The CMMI Associate exam covers only the CMMI Core Practice Areas in Figure 10. Core Practice Areas. The CMMI Practitioner exam covers both the CMMI Core Practice Areas in Figure 10. Core Practice Areas and the domain Practice Areas in Figure 11. CMMI Domain Specific Practice Areas. Content questions on the domains is NOT limited to the domain specific Practice Areas but may also include the core Practice Areas and how they are applied to specific domains or contexts.

LEVEL LEVEL LEVEL LEVEL Causal Analysis & Resolution **Configuration Management Decision Analysis & Resolution** Estimating Governance Implementation Infrastructure III Managing Performance & Measurement **Monitor & Control** Organizational Training Peer Reviews Planning & PCM **∳⊒** PQA **Process Quality Assurance** EZI SS RDM Requirements Development & Management **Risk & Opportunity Management Verification & Validation** 

**Figure 10. Core Practice Areas** 

Figure 11. CMMI Domain Specific Practice Areas

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	
Data Management	1	2	3		DATA
Data Quality	1	2	3		Ā
Product Integration	1	2	3		DEVEL
Technical Solution	1	2	3		DEV
WE Workforce Empowerment	1	2	3		PEOPLE
Enabling Safety	1	2	3		SAFETY SAF
Enabling Security	1	2	3		SECURITY SEC
Managing Security Threats & Vulnerabilities	1	2	3	4	SECURITY SEC
Continuity	1	2	3		
Incident Resolution & Prevention	1	2	3		SERVICES SVC
Service Delivery Management	1	2	3		ICES
Strategic Service Management	1	2	3		
Supplier Agreement Management	1	2	3	4	SUPPLIERS SPM
Enabling Virtual Work	1	2	3		VIRTUAL VRT
CMMI061V7 © 2023 ISACA					

#### **Exam Guidance Overview**

The CMMI Associate and CMMI Practitioner exams are not proctored. The CMMI Professional exam is proctored. Figure 12. Exam Information outlines prerequisites, content areas, number of questions, and duration. Figure 13. Exam Guidance Material describes the content included in this guidance.

CMMI **CMMI CMMI Associate Practitioner Professional** Prerequi-Foundations **Building Organizational** Applying CMMI, of Capability Professional Experience sites Capability • CMMI Core (50%) • CMMI Core (23%) • CMMI for Development • CMMI for Development (23%) (15%)• CMMI for Services (25%) • CMMI for Services (15%) CMMI for Security and Safety Content CMMI Core CMMI for Security and (10%)Area % (100%)Safety (5%) • CMMI for Suppliers (5%) • CMMI for Suppliers (5%) • CMMI for Data (7%) • CMMI for Data (5%) • CMMI for People (7%) • CMMI for People (5%)

Figure 12. Exam Information

Figure 13. Exam Guidance Material

120

4 hours

Feature	Description
Overview	The Overview provides the context of the content.
Example Exam Questions and Answers	The self-assessment example exam questions in each section are not intended to measure the potential test taker's ability to answer questions correctly on a CMMI exam for that content area. Instead, the questions are intended to familiarize the potential test taker with question structure; these may or may not be similar to questions that appear on the actual examination.

#### Preparing for a CMMI Exam

60

2.5 hours

Questions Duration

CMMI exams evaluate a Candidate's practical knowledge, experience, and ability to apply it to the content described in this guidance material. The exam Candidate should look to multiple resources to prepare for the exam, including this review guidance, training course materials, course notes, and the CMMI model. Candidates should read this guidance to identify areas where they need more knowledge, and then consult reference sources to expand their knowledge. Sample self-assessment questions and answers are provided. Remember that the sample questions may not reflect actual questions appearing on the exam.

120

4 hours

#### **Time to Prepare**

Having adequate time to prepare for an exam is critical. Exam Candidates should take some time after their respective course completion to review this guidance and to ensure that they have mastery over all course Learner Objectives and have reviewed the Exam Content Outlines (ECOs) prior to taking the exam. For the CMMI Professional exam, Candidates should spend time between achieving a CMMI Practitioner certification and taking the prerequisite training for the CMMI Professional exam, *Applying CMMI*. Most Candidates spend three to six months studying the model prior to taking the *Applying CMMI* course. Properly preparing for the *Applying CMMI* course helps professional Candidates apply their model knowledge in different organizational contexts, which helps a Candidate gain the knowledge needed to pass the CMMI Professional exam. It is a best practice for Candidates to create an exam study plan to prepare, e.g., set aside a designated time each week to study.

#### **CMMI Associate Exam**

#### **Overview**

The CMMI Associate certification provides an entry-level and foundational certification. This certification is best for individuals looking to validate entry-level knowledge but is not appropriate for individuals looking to take advanced level courses or pursing other CMMI Certifications. To be eligible a Candidate must first successfully complete the *Foundations of Capability* course or already be a Certified CMMI Associate who is retaking the exam. The CMMI Associate exam is designed to test users on their ability to understand and remember CMMI concepts. CMMI Associate exam takers should be able to recall facts and recognize basic concepts. Exam takers need to understand the CMMI model and summarize, interpret, or explain concepts.

All CMMI Associate exam questions are written at "Remember and Understand" levels on <u>Bloom's Revised Taxonomy</u>. <u>Figure 14. Content Area Coverage: CMMI Associate Exam</u> describes the content area covered in this exam. For more details on the Exam Content Outline (ECO), refer to the <u>CMMI Certification – Certified CMMI Associate Policy</u>.

Figure 14. Content Area Coverage: CMMI Associate Exam

<b>Content Area</b>	<b>Percent of Questions</b>
CMMI Core	100%

#### **Content Area 1: CMMI Core**

Questions in this content area cover core Practice Areas (PAs). Core PAs are a collection of PAs considered foundational. Core PAs enable organizational improvement and provide the building blocks for achieving maturity levels for specified domains.

The CMMI Core content area includes all of the 18 core PAs and is divided into three parts.

- **Part 1:** Describe the components and core PAs of CMMI
- Part 2: Connect the CMMI model with business value
- Part 3: Understand the high-level value of an appraisal

#### Sample CMMI Associate Exam

This sample CMMI Associate exam includes 12 questions equivalent to 20% of the amount of the regular exam. Track exam timing by trying to take the exam in 20% of the allotted 2.5 hours, which would be 30 minutes.

#### **Example Associate Exam Questions**

- 1. Which of the following appraisal type would **NOT** be an option for an appraisal for an organization looking to be appraised for the first time?
  - A. Benchmark
  - B. Sustainment
  - C. Evaluation
  - D. Standard
- 2. A collection of similar Capability Areas is a:
  - A. Category
  - B. Practice Area
  - C. Domain
  - D. View
- 3. Which of the following Practice Areas is in the Planning and Managing Work (PMW) Capability Area?
  - A. Configuration Management (CM)
  - B. Risk and Opportunity Management (RSK)
  - C. Organizational Training (OT)
  - D. Monitor and Control (MC)
- 4. Any organization that is having issues with using the right version of a document could **BEST** benefit from which of the following Practice Areas?
  - A. Monitor and Control (MC)
  - B. Implementation Infrastructure (II)
  - C. Incident Resolution and Prevention (IRP)
  - D. Configuration Management (CM)
- 5. Practice Areas are organized into what type of organizational structures?
  - A. Capability Areas
  - B. Views
  - C. Domains
  - D. Categories
- 6. Which of the following is **NOT** a type of View?
  - A. Customized
  - B. Predefined
  - C. Capability Area
  - D. Practice Area
- 7. Which of the following practice information is **NOT** required to correctly interpret and verify the intent of a practice is met?
  - A. Practice Statement
  - B. Value Statement
  - C. Work Products
  - D. Additional Required Information

- 8. How many Benchmark Appraisals can an Organizational Unit (OU) complete before they are required to do a Sustainment Appraisal?
  - A. 1
  - B. 2
  - C. 3
  - D. An OU is NOT required to ever complete a Sustainment Appraisal
- 9. A collection of similar practices is a:
  - A. Practice Area (PA)
  - B. Capability Area (CA)
  - C. Category
  - D. View
- 10. Which of the following is NOT required practice information?
  - A. Intent
  - B. Example Activities
  - C. Value
  - D. Additional Required Information
- 11. Which of the following can be defined as "organizational level skills, abilities, and knowledge embedded in people, processes, infrastructure, and technology?"
  - A. Process
  - B. Base measure
  - C. Capability
  - D. Infrastructure
- 12. What Process Quality Assurance (PQA) practice includes work products such as noncompliance resolutions?
  - A. PQA 2.1
  - B. PQA 2.2
  - C. PQA 2.3
  - D. PQA 2.4

#### **Key for Example Associate Exam Questions**

1. Which of the following appraisal type would **NOT** be an option for an appraisal for an organization looking to be appraised for the first time?

#### B. Sustainment

2. A collection of similar Capability Areas is a:

#### A. Category

3. Which of the following Practice Areas is in the Planning and Managing Work (PMW) Capability Area?

#### D. Monitor and Control (MC)

4. Any organization that is having issues with using the right version of a document could **BEST** benefit from which of the following Practice Areas?

#### D. Configuration Management (CM)

5. Practice Areas are organized into what type of organizational structures?

#### A. Capability Areas

6. Which of the following is **NOT** a type of View?

#### D. Practice Area

7. Which of the following practice information is **NOT** required to correctly interpret and verify the intent of a practice is met?

#### C. Work Products

8. How many Benchmark Appraisals can an Organizational Unit (OU) complete before they are required to do a Sustainment Appraisal?

#### D. An OU is NOT required to ever complete a Sustainment Appraisal

9. A collection of similar practices is a:

#### A. Practice Area (PA)

10. Which of the following is **NOT** required practice information?

#### **B. Example Activities**

11. Which of the following can be defined as "organizational level skills, abilities, and knowledge embedded in people, processes, infrastructure, and technology?"

#### C. Capability

12. What Process Quality Assurance (PQA) practice includes work products such as noncompliance resolutions?

#### C. PQA 2.3

#### **CMMI Practitioner Exam**

#### **Overview**

The CMMI Practitioner exam is a requirement for all advance level certification. To be eligible a Candidate must first successfully complete the *Building Organizational Capability* course or already have the CMMI Practitioner certification and be renewing it. The CMMI Practitioner exam is designed to test users on their ability to understand and remember CMMI concepts. CMMI Practitioner exam takers should be able to recall facts and recognize basic concepts. Exam takers need to understand the CMMI model and summarize, interpret, or explain concepts.

All CMMI Practitioner exam questions are written at "Remember and Understand" levels on <u>Bloom's Revised Taxonomy</u>. <u>Figure 15. Content Area Coverage: CMMI Practitioner Exam</u> describes the content areas covered in this exam. For more details on the Exam Content Outline (ECO), refer to the <u>CMMI Certification – Certified CMMI Practitioner Policy</u>.

Figure 15. Content Area Coverage: CMMI Practitioner Exam

Content Area	<b>Percent of Questions</b>
CMMI Core (and Virtual)	50%
CMMI for Development	15%
CMMI for Service	15%
CMMI for Security and Safety	5%
CMMI for Suppliers	5%
CMMI for Data	5%
CMMI for People	5%

### **Content Area 1: CMMI Core (and Virtual)**

Questions in this content area cover core Practice Areas (PAs) and the Virtual domain. Core PAs are a collection of PAs considered foundational. Core PAs enable organizational improvement and provide the building blocks for achieving maturity levels for specified domains. The Virtual domain provides capability in delivering products, services, or other solutions from remote locations. The Virtual domain is not limited to just the one Virtual specific PA, but it also includes the core PAs in a virtual context.

Exam coverage for the CMMI Core content area includes all of the 18 core PAs and the 1 Virtual domain specific PA and includes three parts.

Part 1: Describe the components and core PAs of CMMI

Part 2: Connect the CMMI model with business value

Part 3: Understand the high-level value of an appraisal

#### **Content Area 2: CMMI for Development**

Questions in this content area cover the CMMI Development domain. The Development domain provides capability in creating products or solutions, including hardware and software, and their related components. The Development domain is not limited to just the two Development domain specific PAs, but it also includes the core PAs in a development context.

#### **Content Area 3: CMMI for Services**

Questions in this content area cover the CMMI Services domain. The Services domain provides capability in building and delivering an intangible solution comprised of activities or work. The Services domain is not limited to just the four Services domain specific PAs, but it also includes the core PAs in a services context.

#### **Content Area 4: CMMI for Security and Safety**

Questions in this content area cover the CMMI Security and CMMI Safety domains. The Security domain provides capability in identifying and strengthening critical defenses and increasing resilience against threats. The Security domain is not limited to just the two Security domain specific PAs, but it also includes the core PAs in a security context. The Safety domain provides capability in providing and maintaining safe products, services, and other solutions. The Safety domain is not limited to just the one Safety domain specific PA, but it also includes the core PAs in a safety context.

#### **Content Area 5: CMMI for Suppliers**

Questions in this content area cover the CMMI Suppliers domain. The Suppliers domain provides capability in selecting and managing suppliers. The Suppliers domain is not limited to just the one Suppliers domain specific PA, but it also includes the core PAs in a supplier context.

#### **Content Area 6: CMMI for Data**

Questions in this content area cover the CMMI Data domain. The Data domain provides capability in governing and managing data and data quality. The Data domain is not limited to just the two Data domain specific PAs, but it also includes the core PAs in a data context.

#### **Content Area 7: CMMI for People**

Questions in this content area cover the CMMI People domain. The People domain provides capability in developing, retaining, and enabling the workforce to accomplish objectives. The People domain is not limited to just the one People domain specific PA, but it also includes the other PAs in a people context.

#### **Sample CMMI Practitioner Exam**

This sample CMMI Practitioner exam includes 30 questions equivalent to 25% of the amount of the regular exam. Track exam timing by trying to take the exam in 25% of the 4 hour allotted exam time, which would be 60 minutes.

#### **Example Practitioner Exam Questions**

- 1. Which of the following appraisal type would **NOT** be an option for an appraisal for an organization looking to be appraised for the first time?
  - A. Benchmark
  - B. Sustainment
  - C. Evaluation
  - D. Standard
- 2. Which of the following practice information is **NOT** required to correctly interpret and verify the intent of a practice is met?
  - A. Practice Statement
  - B. Value Statement
  - C. Work Products
  - D. Additional Required Information
- 3. All Appraisal Team Members (ATMs) must **FIRST** complete which of the following requirements to even be eligible to be an ATM on any domain appraisal?
  - A. High Maturity Concepts
  - B. CMMI Practitioner Exam
  - C. Appraisal Team Member Training
  - D. Appraisal Method Training
- 4. How many Benchmark Appraisals can an Organizational Unit (OU) complete before they are required to do a Sustainment Appraisal?
  - A. 1
  - B. 2
  - C. 3
  - D. An OU is NOT required to ever complete a Sustainment Appraisal
- 5. Which of the following Practice Areas is **NOT** required in the Development View?
  - A. Requirements Development and Management (RDM)
  - B. Product Integration (PI)
  - C. Data Management (DM)
  - D. Technical Solution (TS)
- 6. How many Practice Areas are specific to the Development domain?
  - A. 1
  - B. 2
  - C. 3
  - D. 4
- 7. If an organization is looking to reduce cost by minimizing defects and ensuring that the solution meets requirements, the organization could **BEST** benefit from which CMMI practice?
  - A. CAR 2.1
  - B. TS 2.2
  - C. PR 2.3
  - D. VV 2.1

- 8. Which model context specific tag could **BEST** help a development organization currently using DevOps by providing additional explanatory information about an industry practice?
  - A. Security
  - B. Development
  - C. Agile Development
  - D. DevSecOps
- 9. Which CMMI practice could **BEST** help an organization identify and manage hazards?
  - A. Enabling Safety (ESAF)
  - B. Enabling Security (ESEC)
  - C. Monitor and Control (MC)
  - D. Risk and Opportunity Management (RSK)
- 10. Which Practice Area could help an organization define criteria for data cleansing?
  - A. Data Management (DM)
  - B. Managing Data (MD)
  - C. Data Quality (DQ)
  - D. Monitor and Control (MC)
- 11. What Practice Area can help an organization improve the usability and accessibility of the data for the work?
  - A. Data Management (DM)
  - B. Managing Data (MD)
  - C. Data Quality (DQ)
  - D. Monitor and Control (MC)
- 12. A collection of similar practices is a:
  - A. Practice Area (PA)
  - B. Capability Area (CA)
  - C. Category
  - D. View
- 13. Which of the following is **NOT** required practice information?
  - A. Intent
  - B. Example Activities
  - C. Value
  - D. Additional Required Information
- 14. Which of the following is **NOT** a core Practice Area?
  - A. Verification and Validation (VV)
  - B. Requirements Development and Management (RDM)
  - C. Enabling Virtual Work (EVW)
  - D. Process Quality Assurance (PQA)
- 15. Which of the following can be defined as "organizational level skills, abilities, and knowledge embedded in people, processes, infrastructure, and technology?"
  - A. Process
  - B. Base measure
  - C. Capability
  - D. Infrastructure
- 16. Which of the following domains would be beneficial for an organization that is looking to gain capability in creating products or solutions?
  - A. Data
  - B. Development

- C. Services
- D. Suppliers
- 17. Which category contains Capability Areas for supporting solution implementation and delivery?
  - A. Doing
  - B. Managing
  - C. Enabling
  - D. Improving
- 18. Practices are organized into \_\_\_\_\_\_, an organizing structure to aid understanding and adoption and provides a path for performance improvement.
  - A. Levels
  - B. Practice Areas
  - C. Practice Groups
  - D. Capability Areas
- 19. What Practice Area can provide value to help increase the likelihood that the solution will satisfy the customer?
  - A. Verification and Validation (VV)
  - B. Technical Solution (TS)
  - C. Supplier Agreement Management (SAM)
  - D. Product Integration (PI)
- 20. What Practice Area contains practices that involve keeping current a list of services and their use descriptions?
  - A. Service Delivery Management (SDM)
  - B. Strategic Service Management (STSM)
  - C. Continuity (CONT)
  - D. Requirements Development and Management (RDM)
- 21. What Process Quality Assurance (PQA) practice includes work products such as noncompliance resolutions?
  - A. PQA 2.1
  - B. POA 2.2
  - C. POA 2.3
  - D. PQA 2.4
- 22. What practice would **BEST** help an organization that is looking to deploy organization standard processes and process assets?
  - A. PAD 2.1
  - B. PAD 2.2
  - C. PAD 3.1
  - D. PCM 3.5
- 23. Which Practice Area increases the likelihood that a solution meets or exceeds customer expectations and needs?
  - A. Service Delivery Management (SDM)
  - B. Monitor and Control (MC)
  - C. Requirements Development and Management (RDM)
  - D. Strategic Service Management (STSM)
- 24. Which of the following Practice Areas contains practices relevant to using organizational compensation strategies?
  - A. Governance (GOV)
  - B. Estimating (EST)

- C. Organizational Training (OT)
- D. Workforce Empowerment (WE)
- 25. Which of the following Managing Performance and Measurement (MPM) practices provides value to organizations to help align measurement and performance activities to increase the likelihood of achieving business results?
  - A. MPM 2.1
  - B. MPM 2.2
  - C. MPM 3.2
  - D. MPM 3.4
- 26. Which appraisal type is only available if an organization nearly misses their rating and meets other criteria?
  - A. Benchmark
  - B. Sustainment
  - C. Evaluation
  - D. Action Plan Reappraisal
- 27. Which of the following Practice Areas is **NOT** in the Managing Business Resilience (MBR) Capability Area?
  - A. Managing Performance and Measurement (MPM)
  - B. Continuity (CONT)
  - C. Incident Resolution and Prevention (IRP)
  - D. Risk and Opportunity Management (RSK)
- 28. What Practice Area is **MOST** closely related to the Planning and Managing Work Practice Areas mitigates adverse impacts?
  - A. Process Management (PCM)
  - B. Process Asset Development (PAD)
  - C. Risk and Opportunity Management (RSK)
  - D. Requirements Development and Management (RDM)
- 29. Organizations trying to understand what caused a major issue could **BEST** benefit from practices from which Practice Area?
  - A. Incident Resolution and Prevention (IRP)
  - B. Decision Analysis and Resolution (DAR)
  - C. Causal Analysis and Resolution (CAR)
  - D. Implementation Infrastructure (II)
- 30. Which Explanatory Material section describes possible outputs that may result from performing a process that meets the intent and value of a CMMI practice?
  - A. Additional Explanatory Information
  - B. Example Activities
  - C. Example Work Products
  - D. Context Specific Information

#### **Key for Example Practitioner Exam Questions**

1. Which of the following appraisal type would **NOT** be an option for an appraisal for an organization looking to be appraised for the first time?

#### **B.** Sustainment

2. Which of the following practice information is **NOT** required to correctly interpret and verify the intent of a practice is met?

#### C. Work Products

3. All Appraisal Team Members (ATMs) must **FIRST** complete which of the following requirements to even be eligible to be an ATM on any domain appraisal?

#### **B. CMMI Practitioner Exam**

4. How many Benchmark Appraisals can an Organizational Unit (OU) complete before they are required to do a Sustainment Appraisal?

#### D. An OU is NOT required to ever complete a Sustainment Appraisal

5. Which of the following Practice Areas is **NOT** required in the Development View?

#### C. Data Management (DM)

6. How many Practice Areas are specific to the Development domain?

#### B. 2

7. If an organization is looking to reduce cost by minimizing defects and ensuring that the solution meets requirements could **BEST** benefit from which CMMI practice?

#### B. TS 2.2

8. Which model context specific tag could **BEST** help a development organization currently using DevOps by providing additional explanatory information about an industry practice?

#### D. DevSecOps

9. Which CMMI practice could **BEST** help an organization identify and manage hazards?

#### A. Enabling Safety (ESAF)

10. Which Practice Area could help an organization define criteria for data cleansing?

#### C. Data Quality (DQ)

11. What Practice Area can help an organization improve the usability and accessibility of the data to the work?

#### A. Data Management (DM)

12. A collection of similar practices is a:

#### A. Practice Area (PA)

13. Which of the following is **NOT** required practice information?

#### **B. Example Activities**

14. Which of the following is not a core Practice Area?

#### C. Enabling Virtual Work (EVW)

15. Which of the following can be defined as "organizational level skills, abilities, and knowledge embedded in people, processes, infrastructure, and technology?"

#### C. Capability

16. Which of the following domains would be beneficial for an organization that is looking to gain capability in creating products or solutions?

#### **B.** Development

17. Which category contains Capability Areas for supporting solution implementation and delivery?

#### C. Enabling

18. Practices are organized into \_\_\_\_\_\_, an organizing structure to aid understanding and adoption and provides a path for performance improvement.

#### C. Practice Groups

19. What Practice Area can provide value to help increase the likelihood that the solution will satisfy the customer?

#### A. Verification and Validation (VV)

20. What Practice Area contains practices that involve keeping current a list of services and their use descriptions?

#### **B. Strategic Service Management (STSM)**

21. What Process Quality Assurance (PQA) practice includes work products such as noncompliance resolutions?

#### C. PQA 2.3

22. What practice would **BEST** help an organization that is looking to deploy organization standard processes and process assets?

#### D. PCM 3.5

23. Which Practice Area increases the likelihood that a solution meets or exceeds customer expectations and needs?

#### C. Requirements Development and Management (RDM)

24. Which of the following Practice Areas contains practices relevant to using organizational compensation strategies?

#### D. Workforce Empowerment (WE)

25. Which of the following Managing Performance and Measurement (MPM) practices provides value to organizations to help align measurement and performance activities to increase the likelihood of achieving business results?

#### A. MPM 2.1

26. Which appraisal type is only available if an organization nearly misses their rating and meets other criteria?

#### D. Action Plan Reappraisal

27. Which of the following Practice Areas is **NOT** in the Managing Business Resilience (MBR) Capability Area?

#### A. Managing Performance and Measurement (MPM)

28. What Practice Area is **MOST** closely related to the Planning and Managing Work Practice Areas mitigates adverse impacts?

#### C. Risk and Opportunity Management (RSK)

29. Organizations trying to understand what caused a major issue could BEST benefit from practices from which Practice Area?

#### C. Causal Analysis and Resolution (CAR)

30. Which Explanatory Material section describes possible outputs that may result from performing a process that meets the intent and value of a CMMI practice?

#### **C. Example Work Products**

#### **CMMI Professional Exam**

#### Overview

After achieving the CMMI Practitioner Certification, students can move on to the Advancing Organizational Course suite and the *Applying CMMI* course. Upon completion of this course, students may take the CMMI Professional Exam. The CMMI Professional exam is designed to test users on their ability to apply and analyze CMMI concepts. CMMI Professional exam takers should be able to apply and interpret the model and address basic concepts. Exam takers need to understand the CMMI model and demonstrate, interpret, compare, or differentiate concepts.

All Professional questions are written at "Apply and Analyze" levels on <u>Bloom's Revised Taxonomy</u>. Professional exam questions are more technical than Practitioner exam questions, and seek to demonstrate a more in-depth understanding of model nuances and how the PAs/Practices relate to solve problems, etc. <u>Figure 16. Content Area Coverage: CMMI Professional Exam</u> describes the content areas covered in this exam. For more details on the Exam Content Outline (ECO), refer to the <u>CMMI Certification – Certified CMMI Professional Policy</u>.

Figure 16.	<b>Content Area</b>	<b>Coverage:</b>	<b>CMMI</b>	<b>Professional</b>	<b>Exam</b>
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Content Area	<b>Percent of Questions</b>
CMMI Core (and Virtual)	23%
CMMI for Development	23%
CMMI for Service	25%
CMMI for Security and Safety	10%
CMMI for Suppliers	5%
CMMI for Data	7%
CMMI for People	7%

### **Content Area 1: CMMI Core (and Virtual)**

Questions in this content area cover core Practice Areas (PAs) and the Virtual domain. Core PAs are a collection of PAs considered foundational. Core PAs enable organizational improvement and provide the building blocks for achieving maturity levels for specified domains. The Virtual domain provides capability in delivering products, services, or other solutions from remote locations. The Virtual domain is not limited to just the one Virtual domain specific PA, but it also includes the other PAs in a virtual context.

#### **Content Area 2: CMMI for Development**

Questions in this content area cover the CMMI for Development domain. The Development domain provides capability in creating products or solutions, including hardware and software, and their related components. The Development domain is not limited to just the two Development specific PAs, but it also includes the other PAs in a development context.

#### **Content Area 3: CMMI for Services**

Questions in this content area cover the CMMI for Services domain. The Services domain provides capability in building and delivering an intangible solution comprised of activities or work. The Services domain is not limited to just the four Services domain specific PAs, but it also includes the other PAs in a services context.

#### **Content Area 4: CMMI for Security and Safety**

Questions in this content area cover the CMMI for Security and CMMI for Safety domains. The Security domain provides capability in identifying and strengthening critical defenses and increasing resilience against threats. The Security domain is not limited to just the two Security specific PAs, but it also includes the other PAs in a security context. The Safety domain provides capability in providing and maintaining safe products, services, and other solutions. The Safety domain is not limited to just the one Safety specific PA, but it also includes the other PAs in a safety context.

#### **Content Area 5: CMMI for Suppliers**

Questions in this content area cover the CMMI for Suppliers domain. The Suppliers domain provides capability in selecting and managing Suppliers. The Suppliers domain is not limited to just the Supplier specific PA, but it also includes the other PAs in a supplier context.

#### **Content Area 6: CMMI for Data**

Questions in this content area cover the CMMI for Data domain. The Data domain provides capability in governing and managing data and data quality. The Data domain is not limited to just the two Data specific PAs, but it also includes the other PAs in a services context.

#### **Content Area 7: CMMI for People**

Questions in this content area cover the CMMI for People domain. The People domain provides capability in developing, retaining, and enabling the workforce to accomplish objectives. The People domain is not limited to just the one People specific PA, but it also includes the other PAs in a people context.

## Registering and Scheduling for the CMMI Professional Certification Exam

After a student has successfully completed *Applying CMMI* and has been marked as completed in the system, they receive an email to schedule their exam with ISACA's test delivery vendor, PSI. The CMMI Professional Exam is proctored and therefore students must register in advance.

- Registration for a CMMI Professional Exam: Administered on a continuous basis at qualifying test sites or virtually online.
- Scheduling: To schedule a CMMI Professional exam at PSI, refer to the PSI <u>CMMI</u>
   <u>Certification Certified CMMI Professional Policy.</u> The Candidate receives a scheduling confirmation email from <u>no-reply@psiexams.com</u> confirming the exam appointment.

#### **Sample Professional Exam**

#### **Example Professional Exam Questions**

- 1. When implementing agile development processes, how can organizations use release planning to help meet the intent and value of the Requirements Development and Management (RDM) Practice Area?
  - A. Eliciting the needs of the product owner to meet the intent and value of RDM practice 2.1
  - B. Maintaining a record of bi-directional traceability of the user stories to meet the intent and value of RDM practice 2.5
  - C. Developing operational concepts and scenarios to determine what should be accomplished in the release to meet the intent and value of RDM practice 3.2
  - D. Recording requirements for the release to meet the intent and value of RDM practice 3.3
- 2. What is the **BEST** action a Human Resources department do to ensure people have the needed knowledge and skills to perform the processes?
  - A. Review the organization's training program to ensure it supports the organization's business objectives
  - B. Hold a meeting with the senior management once a month
  - C. Review training budget expenditures with directors
  - D. Ask the training group for status reports on the number of training classes held compared to the number planned
- 3. What Practice Area can help a group identify and evaluate process improvement opportunities?
  - A. Decision Analysis and Resolution (DAR)
  - B. Process Management (PCM)
  - C. Planning (PLAN)
  - D. Process Asset Development (PAD)
- 4. Which practice in Risk and Opportunity Management (RSK) helps an organization address potential problems caused by the transition to agile development methods by using analyses, plans, and triggers to anticipate actions needed to minimize risk impact?
  - A. RSK 1.1
  - B. RSK 3.1
  - C. RSK 3.4
  - D. RSK 3.5
- 5. When developing an estimating process which of the following could be used to estimate size to address Estimating (EST) practice 2.2?
  - A. A relative size using story points after requirements have been converted into user stories
  - B. A count of the number of requirements
  - C. A count of the tasks that will be performed to address each requirement during the sprint
  - D. Senior management guess on size
- 6. Which of the following Practice Areas **BEST** helps the process group know if the intent and value of Implementation Infrastructure (II) practice 3.2 is being met with the new estimating process?
  - A. Configuration Management (CM)
  - B. Process Quality Assurance (PQA)

- C. Monitor and Control (MC)
- D. Planning (PLAN)
- 7. An organization wants to implement a new DevSecOps development process, and they want to ensure it remains persistent and habitual. Which of the following **BEST** describes the characteristics of a persistent and habitual process?
  - A. People implement a process tailored from the organization's set of standard processes according to the organization's tailoring guidelines
  - B. People implement the process appropriately and consistently and don't stop doing it, even when there is a crisis
  - C. People in all projects and work groups within the organization implement the process in the same way
  - D. People use statistical and other quantitative techniques to manage the process
- 8. Which of the following activities performed meet the intent and value of the Decision Analysis and Resolution (DAR) Practice Area?
  - A. A manager consults a decision matrix when issues arise
  - B. The organization keeps a library of past recommendations from the innovation team
  - C. The innovation team conducts a formal decision meeting to weigh alternatives for the two potential business opportunities
  - D. The innovation team asks for input from the technical leads before making a major decision on which new business opportunity to pursue
- 9. Which of the following Practice Areas **BEST** helps an organization understand resource needs and prepare for taking on additional workload while meeting current service agreements?
  - A. Causal Analysis and Resolution (CAR)
  - B. Implementation Infrastructure (II)
  - C. Supplier Agreement Management (SAM)
  - D. Service Delivery Management (SDM)
- 10. Which of the following Practice Areas would help an organization develop new or revised service systems for supporting work they could gain from winning proposals?
  - A. Governance (GOV)
  - B. Continuity (CONT)
  - C. Technical Solution (TS)
  - D. Organizational Training (OT)
- 11. When developing proposals for new work, how can including standard services help an organization?
  - A. Standard services provide a basis for making the most of a service organization's capabilities to meet business objectives
  - B. Standard services only work if the organization has a large set of services to manage
  - C. Standard services will only help if the organization offers a set of complex services
  - D. All of the above
- 12. Which of the following activities meet the intent and value of the Configuration Management (CM) Practice Area for maintaining engineering drawings for the proposed Big Box Packing Materials system?
  - A. The engineering services group reviews the drawing development process to identify possible improvements

- B. The engineering services group maintains a list of engineering drawings and a count of how many are requested by management review
- C. Members of the engineering services group check which copies of the engineering drawings are available
- D. The engineering services group performs an audit to make sure all correct versions of engineering drawings are stored in their shared repository
- 13. Which of the following is **NOT** a Quality and Process Performance Objective for meeting customer expectations about quality and service?
  - A. To reduce erroneous net meter readings to a specified level
  - B. To maintain a specified quality level for test defects
  - C. To meet energy efficiency ratings as guaranteed in service level agreements
  - D. To achieve a specified maturity level rating
- 14. Which of the following would help an organization in determining potential areas for performance improvement related to incident response?
  - A. Trends in third party insurance costs
  - B. Trends in storm damage costs
  - C. Trends in help desk performance
  - D. Comparison of costs
- 15. Which of the following CMMI practices **BEST** help a service desk fix the problem of unaddressed customer reported incidents?
  - A. II 2.2
  - B. IRP 2.2
  - C. VV 2.3
  - D. CM 2.3
- 16. Which practice in Risk and Opportunity Management (RSK) **BEST** helps an organization establish an overall approach for mitigating the risks associated with power outages and the resulting loss of service?
  - A. RSK 2.2
  - B. RSK 3.2
  - C. RSK 3.3
  - D. RSK 3.5
- 17. Which of the following Practice Areas **BEST** helps an organization recover from significant disruptions to manufacturing operations resulting from a hurricane?
  - A. Continuity (CONT)
  - B. Enabling Safety (ESAF)
  - C. Service Delivery Management (SDM)
  - D. Incident Resolution and Prevention (IRP)
- 18. Which of the following Practice Areas **BEST** helps an organization transition to a more diverse workforce that does not leave close enough to come into the office?
  - A. Continuity (CONT)
  - B. Enabling Virtual Work (EVW)
  - C. Organizational Training (OT)
  - D. Enabling Security (ESEC)
- 19. Which of the following Practice Areas does **NOT** help a program office ensure that their supplier deliverable works as intended before acceptance?
  - A. Decision Analysis and Resolution (DAR)
  - B. Monitor and Control (MC)
  - C. Supplier Agreement Management (SAM)

- D. Verification and Validation (VV)
- 20. Which of the following Practice Areas could help organization A's program office determine if organization B is meeting its obligations under the supplier agreements?
  - A. Decision Analysis and Resolution (DAR)
  - B. Monitor and Control (MC)
  - C. Configuration Management (CM)
  - D. Process Management (PCM)
- 21. Which of the following Practice Areas **BEST** helps a process team identify problems with a new process?
  - A. Decision Analysis and Resolution (DAR)
  - B. Monitor and Control (MC)
  - C. Process Asset Development (PAD)
  - D. Process Quality Assurance (PQA)
- 22. Which of the following practices **BEST** helps to reduce the likelihood of receiving an incomplete or incorrect work product from a supplier?
  - A. DAR 2.5
  - B. PQA 2.3
  - C. PAD 2.2
  - D. SAM 2.4
- 23. After establishing standard processes for developing solicitation packages and supplier agreements, which of the following Practice Areas helps an organization ensure that all required content is included in the packages and agreements?
  - A. Decision Analysis and Resolution (DAR)
  - B. Peer Reviews (PR)
  - C. Configuration Management (CM)
  - D. Risk and Opportunity Management (RSK)
- 24. Which of the following Practice Areas **BEST** helps an organization deal with the constraints associated with new technology to minimizing potential negative impacts?
  - A. Governance (GOV)
  - B. Monitor and Control (MC)
  - C. Risk and Opportunity Management (RSK)
  - D. Technical Solution (TS)
- 25. Which Practice Area **BEST** helps an organization ensure that new technology is integrated into the necessary testing environment and can help minimize project delays?
  - A. Planning (PLAN)
  - B. Risk and Opportunity Management (RSK)
  - C. Technical Solution (TS)
  - D. Verification and Validation (VV)
- 26. Which of the following activities could an organization use to address issues and concerns with cybersecurity threats?
  - A. Buy the most popular cybersecurity tool
  - B. Follow a defined approach to address cybersecurity needs
  - C. Send people to a cybersecurity conference
  - D. Design and build an internal solution to meet cybersecurity requirements
- 27. Which of the following practices **BEST** helps an organization determine if the organization has the capacity and availability to accommodate the introduction of new technology?
  - A. EST 3.2

- B. MPM 3.5
- C. PLAN 2.1
- D. RSK 2.2
- 28. Which of the following Practice Areas would help an organization understand current resource commitments to determine needed resources for pursuing new technology?
  - A. Decision Analysis and Resolution (DAR)
  - B. Implementation Infrastructure (II)
  - C. Managing Performance and Measurement (MPM)
  - D. Supplier Agreement Management (SAM)
- 29. If an organization decides to realign their workforce to accommodate the use of new cybersecurity technology, which of the following Practice Areas ensures individuals are prepared and have been trained for their new responsibilities?
  - A. Enabling Security (ESEC)
  - B. Organizational Training (OT)
  - C. Requirements Development and Management (RDM)
  - D. Managing Security Threats and Vulnerabilities (MST)
- 30. An organization with a security approach to managing Personally Identifiable Information (PII) has had security incidents could **BEST** benefit from what Practice Area?
  - A. Data Quality (DQ)
  - B. Enabling Security (ESEC)
  - C. Managing Security Threats and Vulnerabilities (MST)
  - D. Managing Data (MD)

#### **Key for Example Exam Questions**

1. When implementing agile development processes, how can organizations use release planning to help meet the intent and value of the Requirements Development and Management (RDM) Practice Area?

# A. Eliciting the needs of the product owner to meet the intent and value of RDM practice 2.1

2. What is the **BEST** action a Human Resources department do to ensure people have the needed knowledge and skills to perform the new processes?

# A. Review the organization's training program to ensure it supports the organization's business objectives

3. What Practice Area helps a group identify and evaluate process improvement opportunities?

#### B. Process Management (PCM)

4. Which practice in Risk and Opportunity Management (RSK) helps an organization address problems caused by the transition to agile development methods by using analyses, plans, and triggers to anticipate actions needed to minimize risk impact?

#### D. RSK 3.5

5. When developing an estimating process which of the following could be used to estimate size to address Estimating (EST) practice 2.2?

# A. A relative size using story points after requirements have been converted into user stories

6. Which of the following Practice Areas **BEST** helps the process group know if the intent and value of Implementation Infrastructure (II) practice 3.2 is being met with the new estimating process?

#### **B. Process Quality Assurance (PQA)**

7. An organization wants to implement a new DevSecOps development process, and they want to ensure it remains persistent and habitual. Which of the following BEST describes the characteristics of a persistent and habitual process?

# B. People implement the process appropriately and consistently and don't stop doing it, even when there is a crisis

8. Which of the following activities performed meet the intent and value of the Decision Analysis and Resolution (DAR) Practice Area?

# C. The innovation team conducts a formal decision meeting to weigh alternatives for the two potential business opportunities

9. Which of the following Practice Areas **BEST** helps an organization understand resource needs and prepare for taking on additional workload while meeting current service agreements?

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#### D. To achieve a specified maturity level rating

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19. Which of the following Practice Areas does **NOT** help a program office ensure that their supplier deliverable works as intended before acceptance?

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20. Which of the following Practice Areas could help organization A program office determine if organization B is meeting its obligations under the supplier agreements?

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#### B. Follow a defined approach to address cybersecurity needs

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30. An organization with a security approach to managing Personally Identifiable Information (PII) has had security incidents could **BEST** benefit from what Practice Area?

#### C. Managing Security Threats and Vulnerabilities (MST)

# **Observation Guidance**

#### **Overview**

Observations are the final step for qualified Candidates to become either a Certified CMMI Lead Appraiser or Certified CMMI Instructor. To become certified, a Candidate must effectively deliver activities and meet all objectives during the observation. Candidates are provided an observer who is responsible to help guide the Candidate throughout the process and provide coaching throughout the entire observation event.

#### **Observation Process**

To take the next step in the certification pathway a CMMI Instructor or CMMI Lead Appraiser must first successfully pass their prerequisite training course. More information on observations is reviewed in depth during *CMMI Instructor Training* or *CMMI Lead Appraiser Training*.

Observation Requirements: Refer to the <u>CMMI Certification - Course Observation Policy</u> for more information. Refer to the <u>CMMI Certification - Benchmark Appraisal Observation Policy</u> for more information.

Observation Preparation: Observations should not be scheduled immediately after a Candidate has completed training; Candidates should continue to study source material i.e., MDD, CMMI model, and course materials.

Getting Started: Recommended next steps for initiating the Observation process:

- Verify successful completion of CMMI Mastering Organizational Capability level course
- Review Observation Guidance, and the corresponding observation policies.
- Identify observation opportunity that aligns to the observation requirements and parameters. Complete an Observation Request Form and submit to ISACA.
- Verify no Conflicts of Interest (COIs) exist with Observer once potential Observer is identified and communicated by ISACA
- Once ISACA confirms the Observer, establish contact with the Observer, and coordinate to establish a meeting schedule
- Plan and prepare for a live observation event following all applicable policies, requirements, and parameters.
  - For courses: Define the course in the Course Management System (CMS) as soon as class roster is confirmed. Provide a course plan to the Observer for review prior to course delivery.
  - For appraisals: Begin setting up the Appraisal in the CMMI Appraisal System (CAS) as soon as possible. Add the Observer to the appraisal team so they can review the appraisal plan in CAS and provide feedback.