



APPENDIX A: KNOWLEDGE ASSESSMENT EXAM CONTENT OUTLINE

Exam Details:

The exam has 150 multiple-choice questions, each with four response options and one correct answer.

Overall Test Blueprint

Domain	# Items	Percent of Exam
Domain 1: Principles	23	15%
Domain 2: People-Related	31	21%
Domain 3: Practices	96	64%
Total	150	100%

Domain / Sub-Domains	# Items
Domain 1: Principles	
1.1: Identify key features of a Lean culture	3
1.2: Recognize Lean Operating System (Lean Project Delivery System) as an organized implementation of Lean Principles and Tools supporting a Lean culture	2
1.3: Determine if actions represent Respect for People	3
1.4: Determine if actions represent Optimizing the Whole	2
1.5: Determine if actions represent Generating Value	3
1.6: Distinguish 8 types of Waste	2
1.7: Determine if actions reduce or eliminate waste	2
1.8: Determine if actions represent Focus on Flow	2
1.9: Determine if actions support Continuous Improvement/Plan Do Check Act (PDCA)	2
1.10: Identify key features of Integrated Project Delivery/IPD	2
Total	23

Domain 2: People-Related	
2.1: Determine if actions represent creating a Lean Culture	2
2.2: Determine if actions represent exemplary Onboarding/Team Forming	2
2.3: Determine if actions represent building a High-performing Team	2
2.4: Determine if actions represent exemplary methods for assessing the emotional health of the team	2
2.5: Determine if actions support exemplary Early Stakeholder Involvement	2
2.6: Determine if actions support a culture of Commitment/Accountability	2
2.7: Determine if actions support making a Reliable Promise/Commitment	2
2.8: Determine if actions support creating project Conditions of Satisfaction (CoS)	2
2.9: Determine if actions support appropriate use of Conditions of Satisfaction (CoS)	2
2.10: Determine if actions represent effective Distributed Leadership	2
2.11: Determine if actions represent approaches to creating and maintain trust	2
2.12: Determine if actions represent effective communication	3
2.13: Determine if actions represent effective building and maintaining relationships	2



2.14: Determine if actions represent effective use of declaring a breakdown/stopping the line (Andon)	2
2.15: Determine if actions represent effective approach to developing a Shared Purpose/Impact Statement	2
Total	31

Domain 3: Practices

3.1: Identify the 5 Connected Conversations (levels) of the Last Planner System® in design	2
3.2: Last Planner System® Implementation: Determine if actions represent Pull methodology	2
3.3: Last Planner System® Implementation: Determine if actions support creating a Milestone Plan	2
3.4: Last Planner System® Implementation: Determine if actions support creating a Phase Pull Plan	2
3.5: Last Planner System® Implementation: Identify effective practices for stickie note/tag content	2
3.6: Last Planner System® Implementation: Determine if actions support creating a Design Cycle Plan	2
3.7: Last Planner System® Implementation: Determine if actions support Constraint Identification	2
3.8: Last Planner System® Implementation: Determine if actions support Constraint Mitigation	2
3.9: Last Planner System® Implementation: Determine if actions support creating a Weekly Work Plan	2
3.10: Last Planner System® Implementation: Determine if actions support Percent Plan Complete Tracking	2
3.11: Last Planner System® Implementation: Determine if actions support Variance Management	2
3.12: Last Planner System® Implementation: Determine if actions support conducting the Huddle or Check-In	2
3.13: Identify key aspects of Takt Time methodology	1
3.14: Recognize key differences between Last Planner System® use in construction vs. design	2
3.15: Determine if actions support an Effective Big Room approach	2
3.16: Distinguish the difference between leading and facilitating	2
3.17: Determine if actions represent effective facilitation/meeting management	2
3.18: Determine if actions represent effective Visual Management implementation	2
3.19: Determine if actions represent a Target Value Delivery (TVD) approach	2
3.20: Target Value Delivery Implementation: Determine if actions represent the Business Case Phase	2
3.21: Target Value Delivery Implementation: Determine if actions represent the Validation Phase	2
3.22: Target Value Delivery Implementation: Determine if actions represent the Value Delivery Phase	2
3.23: Target Value Delivery Implementation: Determine if actions represent the Value Post Delivery Phase	2
3.24: Target Value Delivery Implementation: Determine if actions represent effective Cost Model relationship to TVD	2
3.25: Target Value Delivery Implementation: Determine if actions represent exemplary definition of value	2
3.26: Target Value Delivery Implementation: Determine if actions represent exemplary tracking of value	2
3.27: Target Value Delivery Implementation: Determine if actions represent exemplary Current Working Estimate implementation	2
3.28: Target Value Delivery Implementation: Determine if actions support Risk/Opportunity Management	2
3.29: Determine if actions represent exemplary Work Cluster/Work Group organization	2



3.30: Work Cluster/Work Group Organization: Determine if actions represent exemplary decision-making and information workflow	2
3.31: Work Cluster/Work Group Organization: Determine if actions represent exemplary Integration Event implementation	2
3.32: Determine if actions represent Set-based Design methodology	2
3.33: Determine if actions represent exemplary collaborative problem-solving using A3 Thinking	2
3.34: Recognize the connection between Root Cause Analysis and 5 Why Analysis	2
3.35: Determine if actions support exemplary 5 Why Analysis methodology	2
3.36: Identify the key aspects of Choosing by Advantages	2
3.37: Determine if actions represent Retrospective/Structured Reflection	2
3.38: Determine if actions support conducting an exemplary Plus/Delta	2
3.39: Identify circumstances to implement Value Stream Mapping	1
3.40: Determine if actions represent exemplary Process Mapping	2
3.41: Determine if actions and behaviors support conducting effective Gemba Walks for design	2
3.42: Determine if actions support conducting effective 3P mock up studies	1
3.43: Determine if actions support implementing 5S	1
3.44: Determine if actions represent effective Mistake Proofing	1
3.45: Recognize the connection between BIM and Lean	2
3.46: Determine if actions support effective use of buffers with Just-in-Time (JIT)	1
3.47: Determine if actions support effective Kaizen/Rapid Improvement event	2
3.48: Determine if actions represent creating and using Standard Work supporting continuous improvement	2
3.49: Recognize if actions represent effective Design for Safety approaches	2
3.50: Determine if actions support effective design for Continuous Flow in Construction	2
3.51: Determine if actions support design for Prefabrication	2
Total	96