

PRACTICE EXAM 10: LEAN SIX SIGMA GREEN BELT SIMULATION (100 QUESTIONS)

This 100-question practice examination follows the ASQ Certified Six Sigma Green Belt Body of Knowledge. Work independently, choose the single best answer, and use the answer key and explanations after completing the examination. The ASQ computer-based CSSGB exam has 110 questions, including 100 scored questions, and 4 hours 18 minutes of exam time.

1. Which Green Belt term is best defined as a goal that is specific, measurable, achievable, relevant, and time-bound?

- A. key performance indicator
- B. takt time
- C. SMART goal
- D. theory of constraints

2. Which Green Belt term is best defined as a metric used to track progress toward an important organizational objective?

- A. key performance indicator
- B. takt time
- C. theory of constraints
- D. Gemba

3. Which Green Belt term is best defined as the pace required to meet customer demand?

- A. theory of constraints
- B. takt time
- C. Gemba

D. value stream map

4. Which Green Belt term is best defined as a method that improves a system by focusing on its limiting constraint?

- A. Gemba
- B. value stream map
- C. DMADV
- D. theory of constraints

5. Which Green Belt term is best defined as the actual place where work is performed?

- A. value stream map
- B. DMADV
- C. IDOV
- D. Gemba

6. Which Green Belt term is best defined as a map of material and information flow through a process?

- A. value stream map
- B. DMADV
- C. IDOV
- D. design FMEA

7. Which Green Belt term is best defined as a design methodology using define, measure, analyze, design, and verify?

- A. IDOV
- B. DMADV
- C. design FMEA
- D. process FMEA

8. Which Green Belt term is best defined as a design methodology using identify, design, optimize, and verify?

- A. design FMEA
- B. process FMEA
- C. IDOV
- D. risk priority number

9. Which Green Belt term is best defined as an FMEA focused on potential product or design failures?

- A. process FMEA
- B. design FMEA
- C. risk priority number
- D. SMART goal

10. Which Green Belt term is best defined as an FMEA focused on potential process failures?

- A. risk priority number
- B. SMART goal
- C. key performance indicator
- D. process FMEA

11. Which Green Belt term is best defined as a traditional FMEA priority score based on severity, occurrence, and detection?

- A. risk priority number
- B. SMART goal
- C. key performance indicator
- D. takt time

12. Which Green Belt term is best defined as comparison with direct competitors to identify performance gaps?

- A. collaborative benchmarking
- B. SIPOC
- C. competitive benchmarking
- D. voice of the customer

13. Which Green Belt term is best defined as comparison with noncompeting organizations willing to share practices?

- A. SIPOC
- B. collaborative benchmarking
- C. voice of the customer
- D. quality function deployment

14. Which Green Belt term is best defined as a high-level view of suppliers, inputs, process, outputs, and customers?

- A. SIPOC
- B. voice of the customer
- C. quality function deployment
- D. Kano model

15. Which Green Belt term is best defined as structured collection of stated and unstated customer needs?

- A. quality function deployment
- B. Kano model
- C. voice of the customer
- D. critical-to-X tree

16. Which Green Belt term is best defined as a method that translates customer needs into technical requirements?

- A. Kano model
- B. critical-to-X tree
- C. project charter
- D. quality function deployment

17. Which Green Belt term is best defined as a model that categorizes customer requirements by their effect on satisfaction?

- A. Kano model
- B. critical-to-X tree
- C. project charter
- D. consequential metric

18. Which Green Belt term is best defined as a tree that translates broad needs into measurable requirements?

- A. project charter
- B. consequential metric
- C. critical path
- D. critical-to-X tree

19. Which Green Belt term is best defined as a document that authorizes a project and defines its purpose, scope, and goals?

- A. consequential metric
- B. critical path
- C. project charter
- D. PERT chart

20. Which Green Belt term is best defined as a measure used to detect an unintended negative effect of a change?

- A. critical path
- B. consequential metric
- C. PERT chart
- D. tollgate review

21. Which Green Belt term is best defined as the sequence of dependent activities that determines minimum project duration?

- A. PERT chart
- B. tollgate review
- C. SWOT analysis
- D. critical path

22. Which Green Belt term is best defined as a network planning tool that represents activity dependencies and uncertainty?

- A. PERT chart
- B. tollgate review
- C. SWOT analysis
- D. prioritization matrix

23. Which Green Belt term is best defined as a formal review that confirms required phase work is complete?

- A. SWOT analysis
- B. prioritization matrix
- C. tollgate review
- D. PDPC

24. Which Green Belt term is best defined as an assessment of strengths, weaknesses, opportunities, and threats?

- A. prioritization matrix
- B. SWOT analysis
- C. PDPC
- D. RACI

25. Which Green Belt term is best defined as a tool that scores alternatives against weighted decision criteria?

- A. PDPC
- B. prioritization matrix
- C. RACI
- D. groupthink

26. Which Green Belt term is best defined as a process decision program chart used to anticipate risks and contingencies?

- A. RACI
- B. groupthink
- C. nominal group technique
- D. PDPC

27. Which Green Belt term is best defined as a matrix that assigns responsible, accountable, consulted, and informed roles?

- A. groupthink
- B. nominal group technique
- C. RACI
- D. multivoting

28. Which Green Belt term is best defined as pressure for agreement that suppresses critical evaluation?

- A. groupthink
- B. nominal group technique
- C. multivoting
- D. rolled throughput yield

29. Which Green Belt term is best defined as a structured method for generating and ranking ideas?

- A. multivoting
- B. rolled throughput yield
- C. competitive benchmarking
- D. nominal group technique

30. Which Green Belt term is best defined as a method for narrowing a list by repeated participant voting?

- A. rolled throughput yield
- B. multivoting
- C. competitive benchmarking
- D. collaborative benchmarking

31. Which Green Belt term is best defined as the probability a unit passes all sequential process steps without rework?

- A. competitive benchmarking
- B. collaborative benchmarking
- C. rolled throughput yield
- D. SIPOC

32. Which Green Belt term is best defined as a visual sequence of activities, decisions, and handoffs in a process?

- A. process map
- B. independent events
- C. mutually exclusive events
- D. central limit theorem

33. Which Green Belt term is best defined as events for which one outcome does not change the probability of the other?

- A. mutually exclusive events
- B. central limit theorem
- C. independent events
- D. normal distribution

34. Which Green Belt term is best defined as events that cannot occur at the same time?

- A. central limit theorem
- B. mutually exclusive events
- C. normal distribution
- D. Poisson distribution

35. Which Green Belt term is best defined as the principle that sample means approach a normal distribution as sample size increases?

- A. central limit theorem
- B. normal distribution
- C. Poisson distribution
- D. nominal scale

36. Which Green Belt term is best defined as a symmetric bell-shaped distribution described by a mean and standard deviation?

- A. Poisson distribution
- B. nominal scale
- C. ordinal scale
- D. normal distribution

37. Which Green Belt term is best defined as a distribution used for counts of relatively rare events in a fixed interval?

- A. Poisson distribution
- B. nominal scale
- C. ordinal scale
- D. interval scale

38. Which Green Belt term is best defined as a measurement scale that uses unordered category labels?

- A. ordinal scale
- B. interval scale
- C. nominal scale
- D. ratio scale

39. Which Green Belt term is best defined as a measurement scale with ordered categories but unequal intervals?

- A. interval scale
- B. ratio scale
- C. stratified sample
- D. ordinal scale

40. Which Green Belt term is best defined as a scale with equal intervals but no true zero?

- A. ratio scale
- B. interval scale
- C. stratified sample
- D. random sample

41. Which Green Belt term is best defined as a scale with equal intervals and a meaningful zero?

- A. stratified sample
- B. ratio scale
- C. random sample
- D. frequency distribution

42. Which Green Belt term is best defined as a sample selected from defined subgroups to ensure representation?

- A. stratified sample
- B. random sample
- C. frequency distribution
- D. box-and-whisker plot

43. Which Green Belt term is best defined as a sample in which each eligible unit has a known chance of selection?

- A. frequency distribution
- B. box-and-whisker plot
- C. gauge repeatability
- D. random sample

44. Which Green Belt term is best defined as a summary showing how often values or categories occur?

- A. box-and-whisker plot
- B. gauge repeatability
- C. frequency distribution
- D. gauge reproducibility

45. Which Green Belt term is best defined as a display of median, quartiles, spread, and potential outliers?

- A. gauge repeatability
- B. gauge reproducibility
- C. box-and-whisker plot
- D. measurement bias

46. Which Green Belt term is best defined as variation when one operator measures the same item repeatedly?

- A. gauge repeatability
- B. gauge reproducibility
- C. measurement bias
- D. process capability

47. Which Green Belt term is best defined as variation attributable to different operators using the same measurement system?

- A. measurement bias
- B. process capability
- C. C_p
- D. gauge reproducibility

48. Which Green Belt term is best defined as a systematic difference between measurement results and a reference value?

- A. process capability
- B. measurement bias
- C. C_p
- D. C_{pk}

49. Which Green Belt term is best defined as the ability of a stable process to meet specification limits?

- A. C_p
- B. process capability
- C. C_{pk}
- D. process map

50. Which Green Belt term is best defined as a potential capability index that compares spread with specification width?

- A. C_{pk}
- B. process map
- C. independent events
- D. C_p

51. Which Green Belt term is best defined as a capability index that considers both spread and process centering?

- A. process map
- B. independent events
- C. C_{pk}
- D. mutually exclusive events

52. Which Green Belt term is best defined as a study that separates positional, cyclical, and temporal sources of variation?

- A. multi-vari study
- B. correlation coefficient
- C. linear regression
- D. statistical significance

53. Which Green Belt term is best defined as a statistic describing the strength and direction of linear association?

- A. linear regression
- B. statistical significance
- C. practical significance
- D. correlation coefficient

54. Which Green Belt term is best defined as a model that estimates an outcome from one or more predictor variables?

- A. linear regression
- B. statistical significance
- C. practical significance
- D. Type I error

55. Which Green Belt term is best defined as evidence that an observed result is unlikely under a stated null hypothesis?

- A. practical significance
- B. statistical significance
- C. Type I error
- D. Type II error

56. Which Green Belt term is best defined as whether an observed difference is large enough to matter operationally?

- A. Type I error
- B. Type II error
- C. practical significance
- D. statistical power

57. Which Green Belt term is best defined as rejecting a null hypothesis that is actually true?

- A. Type I error
- B. Type II error
- C. statistical power
- D. paired t-test

58. Which Green Belt term is best defined as failing to reject a null hypothesis that is actually false?

- A. statistical power
- B. paired t-test
- C. ANOVA
- D. Type II error

59. Which Green Belt term is best defined as the probability of detecting a real effect when it exists?

- A. paired t-test
- B. statistical power
- C. ANOVA
- D. chi-square test

60. Which Green Belt term is best defined as a test that compares means from matched or repeated observations?

- A. ANOVA
- B. chi-square test
- C. paired t-test
- D. F-test

61. Which Green Belt term is best defined as a method for comparing means across three or more groups?

- A. ANOVA
- B. chi-square test
- C. F-test
- D. gap analysis

62. Which Green Belt term is best defined as a test commonly used for categorical frequencies or association?

- A. F-test
- B. chi-square test
- C. gap analysis
- D. fault tree analysis

63. Which Green Belt term is best defined as a test used to compare variances or assess model variance ratios?

- A. gap analysis
- B. fault tree analysis
- C. F-test
- D. 5 Whys

64. Which Green Belt term is best defined as comparison of current performance with a desired future state?

- A. fault tree analysis
- B. 5 Whys
- C. cause-and-effect diagram
- D. gap analysis

65. Which Green Belt term is best defined as a top-down method that traces combinations of causes leading to an event?

- A. 5 Whys
- B. cause-and-effect diagram
- C. root-cause verification
- D. fault tree analysis

66. Which Green Belt term is best defined as a questioning method that probes from a symptom toward an underlying cause?

- A. cause-and-effect diagram
- B. root-cause verification
- C. 5 Whys
- D. p-value

67. Which Green Belt term is best defined as a structured display of possible cause categories for a defined effect?

- A. root-cause verification
- B. cause-and-effect diagram
- C. p-value
- D. multi-vari study

68. Which Green Belt term is best defined as confirmation with evidence that a suspected cause actually drives the problem?

- A. root-cause verification
- B. p-value
- C. multi-vari study
- D. correlation coefficient

69. Which Green Belt term is best defined as the probability of results at least as extreme if the null hypothesis is true?

- A. multi-vari study
- B. correlation coefficient
- C. linear regression
- D. p-value

70. Which Green Belt term is best defined as an input variable intentionally changed or studied in a designed experiment?

- A. level
- B. response
- C. factor
- D. randomization

71. Which Green Belt term is best defined as a specific setting of an experimental factor?

- A. response
- B. level
- C. randomization
- D. blocking

72. Which Green Belt term is best defined as the outcome measured in a designed experiment?

- A. randomization

- B. response
- C. blocking
- D. replication

73. Which Green Belt term is best defined as random assignment or run order used to reduce systematic bias?

- A. randomization
- B. blocking
- C. replication
- D. main effect

74. Which Green Belt term is best defined as grouping similar experimental units to reduce nuisance variation?

- A. blocking
- B. replication
- C. main effect
- D. interaction

75. Which Green Belt term is best defined as repeating experimental conditions to estimate experimental error?

- A. main effect
- B. interaction
- C. pilot test
- D. replication

76. Which Green Belt term is best defined as the average effect of one factor across levels of other factors?

- A. interaction
- B. pilot test
- C. main effect
- D. proof of concept

77. Which Green Belt term is best defined as a condition in which the effect of one factor depends on another factor?

- A. pilot test
- B. interaction
- C. proof of concept
- D. kanban

78. Which Green Belt term is best defined as a limited trial used to assess an implementation before full rollout?

- A. proof of concept
- B. kanban
- C. pilot test
- D. standard work

79. Which Green Belt term is best defined as an early demonstration that an idea is feasible?

- A. kanban
- B. standard work
- C. SMED
- D. proof of concept

80. Which Green Belt term is best defined as a visual pull signal that authorizes replenishment or production?

- A. kanban
- B. standard work
- C. SMED
- D. continuous flow

81. Which Green Belt term is best defined as the current best documented method for performing a task?

- A. SMED
- B. standard work
- C. continuous flow
- D. kaizen blitz

82. Which Green Belt term is best defined as a method for reducing equipment setup or changeover time?

- A. continuous flow
- B. kaizen blitz
- C. SMED
- D. poka-yoke

83. Which Green Belt term is best defined as movement of work with minimal waiting and batching?

- A. continuous flow
- B. kaizen blitz
- C. poka-yoke
- D. factor

84. Which Green Belt term is best defined as a focused, rapid improvement event?

- A. poka-yoke
- B. factor

- C. level
- D. kaizen blitz

85. Which Green Belt term is best defined as a device or method that prevents or immediately detects an error?

- A. factor
- B. level
- C. response
- D. poka-yoke

86. Which Green Belt term is best defined as use of process data and control charts to distinguish routine and unusual variation?

- A. common-cause variation
- B. statistical process control
- C. special-cause variation
- D. rational subgrouping

87. Which Green Belt term is best defined as natural variation inherent in a stable process?

- A. special-cause variation
- B. rational subgrouping
- C. common-cause variation
- D. X-bar and R chart

88. Which Green Belt term is best defined as variation arising from an identifiable unusual source?

- A. special-cause variation
- B. rational subgrouping
- C. X-bar and R chart

D. individuals and moving range chart

89. Which Green Belt term is best defined as forming samples so within-subgroup variation reflects routine process variation?

A. X-bar and R chart

B. individuals and moving range chart

C. p chart

D. rational subgrouping

90. Which Green Belt term is best defined as a chart for subgroup averages and ranges of continuous data?

A. X-bar and R chart

B. individuals and moving range chart

C. p chart

D. np chart

91. Which Green Belt term is best defined as a chart for individual continuous observations when rational subgroups are unavailable?

A. p chart

B. np chart

C. individuals and moving range chart

D. c chart

92. Which Green Belt term is best defined as an attribute control chart for the proportion nonconforming?

A. np chart

B. p chart

- C. c chart
- D. u chart

93. Which Green Belt term is best defined as an attribute control chart for the count nonconforming with constant sample size?

- A. c chart
- B. u chart
- C. np chart
- D. control plan

94. Which Green Belt term is best defined as an attribute control chart for defect counts with constant opportunity?

- A. c chart
- B. u chart
- C. control plan
- D. document control

95. Which Green Belt term is best defined as an attribute control chart for defects per unit when opportunity varies?

- A. control plan
- B. document control
- C. first-party audit
- D. u chart

96. Which Green Belt term is best defined as a document stating what to monitor, who owns it, and what action to take?

- A. document control

- B. control plan
- C. first-party audit
- D. total productive maintenance

97. Which Green Belt term is best defined as management of current approved versions of process documentation?

- A. first-party audit
- B. total productive maintenance
- C. document control
- D. Andon

98. Which Green Belt term is best defined as an internal audit performed by or for the organization?

- A. first-party audit
- B. total productive maintenance
- C. Andon
- D. statistical process control

99. Which Green Belt term is best defined as a proactive equipment-maintenance approach involving operators and maintenance staff?

- A. Andon
- B. total productive maintenance
- C. statistical process control
- D. common-cause variation

100. Which Green Belt term is best defined as a visual signal that communicates abnormal process conditions?

- A. statistical process control

- B. common-cause variation
- C. special-cause variation
- D. Andon

Practice Exam 10: Answer Key and Explanations

1. **C** — SMART goal is correct because it is a goal that is specific, measurable, achievable, relevant, and time-bound. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
2. **A** — key performance indicator is correct because it is a metric used to track progress toward an important organizational objective. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
3. **B** — takt time is correct because it is the pace required to meet customer demand. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
4. **D** — theory of constraints is correct because it is a method that improves a system by focusing on its limiting constraint. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
5. **D** — Gemba is correct because it is the actual place where work is performed. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
6. **A** — value stream map is correct because it is a map of material and information flow through a process. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
7. **B** — DMADV is correct because it is a design methodology using define, measure, analyze, design, and verify. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

8. C — IDOV is correct because it is a design methodology using identify, design, optimize, and verify. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

9. B — design FMEA is correct because it is an FMEA focused on potential product or design failures. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

10. D — process FMEA is correct because it is an FMEA focused on potential process failures. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

11. A — risk priority number is correct because it is a traditional FMEA priority score based on severity, occurrence, and detection. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

12. C — competitive benchmarking is correct because it is comparison with direct competitors to identify performance gaps. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

13. B — collaborative benchmarking is correct because it is comparison with noncompeting organizations willing to share practices. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

14. A — SIPOC is correct because it is a high-level view of suppliers, inputs, process, outputs, and customers. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

15. C — voice of the customer is correct because it is structured collection of stated and unstated customer needs. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

16. D — quality function deployment is correct because it is a method that translates customer needs into technical requirements. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

17. A — Kano model is correct because it is a model that categorizes customer requirements by their effect on satisfaction. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

18. D — critical-to-X tree is correct because it is a tree that translates broad needs into measurable requirements. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

19. C — project charter is correct because it is a document that authorizes a project and defines its purpose, scope, and goals. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project

20. B — consequential metric is correct because it is a measure used to detect an unintended negative effect of a change. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

21. D — critical path is correct because it is the sequence of dependent activities that determines minimum project duration. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

22. A — PERT chart is correct because it is a network planning tool that represents activity dependencies and uncertainty. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

23. C — tollgate review is correct because it is a formal review that confirms required phase work is complete. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

24. B — SWOT analysis is correct because it is an assessment of strengths, weaknesses, opportunities, and threats. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

25. B — prioritization matrix is correct because it is a tool that scores alternatives against weighted decision criteria. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

26. D — PDPC is correct because it is a process decision program chart used to anticipate risks and contingencies. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

27. C — RACI is correct because it is a matrix that assigns responsible, accountable, consulted, and informed roles. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

28. A — groupthink is correct because it is pressure for agreement that suppresses critical evaluation. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

29. D — nominal group technique is correct because it is a structured method for generating and ranking ideas. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

30. B — multivoting is correct because it is a method for narrowing a list by repeated participant voting. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

31. C — rolled throughput yield is correct because it is the probability a unit passes all sequential process steps without rework. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

32. A — process map is correct because it is a visual sequence of activities, decisions, and handoffs in a process. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

33. C — independent events is correct because it is events for which one outcome does not change the probability of the other. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

34. B — mutually exclusive events is correct because it is events that cannot occur at the same time. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

- 35. A** — central limit theorem is correct because it is the principle that sample means approach a normal distribution as sample size increases. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the
- 36. D** — normal distribution is correct because it is a symmetric bell-shaped distribution described by a mean and standard deviation. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 37. A** — Poisson distribution is correct because it is a distribution used for counts of relatively rare events in a fixed interval. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project
- 38. C** — nominal scale is correct because it is a measurement scale that uses unordered category labels. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 39. D** — ordinal scale is correct because it is a measurement scale with ordered categories but unequal intervals. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 40. B** — interval scale is correct because it is a scale with equal intervals but no true zero. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 41. B** — ratio scale is correct because it is a scale with equal intervals and a meaningful zero. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 42. A** — stratified sample is correct because it is a sample selected from defined subgroups to ensure representation. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 43. D** — random sample is correct because it is a sample in which each eligible unit has a known chance of selection. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project

- 44. C** — frequency distribution is correct because it is a summary showing how often values or categories occur. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 45. C** — box-and-whisker plot is correct because it is a display of median, quartiles, spread, and potential outliers. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 46. A** — gauge repeatability is correct because it is variation when one operator measures the same item repeatedly. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 47. D** — gauge reproducibility is correct because it is variation attributable to different operators using the same measurement system. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 48. B** — measurement bias is correct because it is a systematic difference between measurement results and a reference value. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 49. B** — process capability is correct because it is the ability of a stable process to meet specification limits. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 50. D** — C_p is correct because it is a potential capability index that compares spread with specification width. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 51. C** — C_{pk} is correct because it is a capability index that considers both spread and process centering. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.
- 52. A** — multi-vari study is correct because it is a study that separates positional, cyclical, and temporal sources of variation. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

53. D — correlation coefficient is correct because it is a statistic describing the strength and direction of linear association. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

54. A — linear regression is correct because it is a model that estimates an outcome from one or more predictor variables. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

55. B — statistical significance is correct because it is evidence that an observed result is unlikely under a stated null hypothesis. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

56. C — practical significance is correct because it is whether an observed difference is large enough to matter operationally. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

57. A — Type I error is correct because it is rejecting a null hypothesis that is actually true. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

58. D — Type II error is correct because it is failing to reject a null hypothesis that is actually false. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

59. B — statistical power is correct because it is the probability of detecting a real effect when it exists. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

60. C — paired t-test is correct because it is a test that compares means from matched or repeated observations. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

61. A — ANOVA is correct because it is a method for comparing means across three or more groups. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

62. B — chi-square test is correct because it is a test commonly used for categorical frequencies or association. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

63. C — F-test is correct because it is a test used to compare variances or assess model variance ratios. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

64. D — gap analysis is correct because it is comparison of current performance with a desired future state. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

65. D — fault tree analysis is correct because it is a top-down method that traces combinations of causes leading to an event. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project

66. C — 5 Whys is correct because it is a questioning method that probes from a symptom toward an underlying cause. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

67. B — cause-and-effect diagram is correct because it is a structured display of possible cause categories for a defined effect. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

68. A — root-cause verification is correct because it is confirmation with evidence that a suspected cause actually drives the problem. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

69. D — p-value is correct because it is the probability of results at least as extreme if the null hypothesis is true. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project

70. C — factor is correct because it is an input variable intentionally changed or studied in a designed experiment. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

71. B — level is correct because it is a specific setting of an experimental factor. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

72. B — response is correct because it is the outcome measured in a designed experiment. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

73. A — randomization is correct because it is random assignment or run order used to reduce systematic bias. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

74. A — blocking is correct because it is grouping similar experimental units to reduce nuisance variation. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

75. D — replication is correct because it is repeating experimental conditions to estimate experimental error. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

76. C — main effect is correct because it is the average effect of one factor across levels of other factors. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

77. B — interaction is correct because it is a condition in which the effect of one factor depends on another factor. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

78. C — pilot test is correct because it is a limited trial used to assess an implementation before full rollout. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

79. D — proof of concept is correct because it is an early demonstration that an idea is feasible. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

80. A — kanban is correct because it is a visual pull signal that authorizes replenishment or production. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

81. B — standard work is correct because it is the current best documented method for performing a task. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

82. C — SMED is correct because it is a method for reducing equipment setup or changeover time. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

83. A — continuous flow is correct because it is movement of work with minimal waiting and batching. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

84. D — kaizen blitz is correct because it is a focused, rapid improvement event. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

85. D — poka-yoke is correct because it is a device or method that prevents or immediately detects an error. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

86. B — statistical process control is correct because it is use of process data and control charts to distinguish routine and unusual variation. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the

87. C — common-cause variation is correct because it is natural variation inherent in a stable process. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

88. A — special-cause variation is correct because it is variation arising from an identifiable unusual source. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

89. D — rational subgrouping is correct because it is forming samples so within-subgroup variation reflects routine process variation. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

90. A — X-bar and R chart is correct because it is a chart for subgroup averages and ranges of continuous data. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

91. C — individuals and moving range chart is correct because it is a chart for individual continuous observations when rational subgroups are unavailable. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the

92. B — p chart is correct because it is an attribute control chart for the proportion nonconforming. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

93. C — np chart is correct because it is an attribute control chart for the count nonconforming with constant sample size. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

94. A — c chart is correct because it is an attribute control chart for defect counts with constant opportunity. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

95. D — u chart is correct because it is an attribute control chart for defects per unit when opportunity varies. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

96. B — control plan is correct because it is a document stating what to monitor, who owns it, and what action to take. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the

97. C — document control is correct because it is management of current approved versions of process documentation. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

98. A — first-party audit is correct because it is an internal audit performed by or for the organization. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

99. B — total productive maintenance is correct because it is a proactive equipment-maintenance approach involving operators and maintenance staff. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.

100. D — Andon is correct because it is a visual signal that communicates abnormal process conditions. The alternatives name distinct Green Belt tools, measures, or activities. Identifying the precise term helps a practitioner choose a method that fits the problem, interpret the finding correctly, and communicate an appropriate next step to the team in the project context.