

PRACTICE EXAM 21: LEAN SIX SIGMA BLACK BELT SIMULATION (150 QUESTIONS)

This 150-question simulation is designed for Lean Six Sigma Black Belt study. Select the one best answer for each question. It is a practice resource, not an official examination. Topics cover leadership, DMAIC, Lean flow, measurement systems, variation, capability, root-cause analysis, improvement, and control. Allow four hours and 18 minutes for a realistic Black Belt practice session.

1. Which statement best describes a Six Sigma Black Belt?

- A. A sponsor who approves capital spending
- B. A project leader who applies DMAIC and mentors teams
- C. A beginner who only observes projects
- D. An auditor who certifies supplier systems

2. A data collection plan should identify

- A. only the desired final answer
- B. only the project budget owner
- C. what is collected, by whom, when, and how
- D. only the customer complaint count

3. A metric is most useful when it is

- A. easy to collect but unrelated to the project
- B. changed whenever results are unfavorable
- C. kept confidential from process owners
- D. clearly defined and linked to a decision or goal

4. Precision refers to

- A. the closeness of a result to a target value
- B. the closeness of repeated measurements to each other
- C. the difference between upper and lower limits
- D. the number of defects in a sample

5. A stakeholder is anyone who

- A. can affect or is affected by the project
- B. has a Six Sigma certification
- C. works only in the finance department
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6. Visual management makes performance easier to understand by

- A. hiding data until the monthly review
- B. replacing all team meetings with dashboards
- C. displaying status and abnormalities where work occurs
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7. A queue forms when

- A. every step has equal capacity
- B. arrival rate exceeds effective service capacity
- C. work is completed exactly at takt time
- D. all defects are corrected immediately

8. Repeatability is variation when

- A. the same appraiser measures the same item repeatedly
- B. different appraisers measure the same item
- C. the process changes between shifts
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9. The primary purpose of Lean is to

- A. increase inspection at every operation
- B. raise inventory to prevent shortages
- C. separate work into more departments
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10. Overproduction is best described as

- A. shipping a product after the due date
- B. repairing an item that failed inspection
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11. Standardization after improvement helps

- A. ensure every process uses the same software
- B. make the new method the normal way of working
- C. remove the need for process monitoring
- D. eliminate all future training

12. A baseline is

- A. the documented starting level before improvement
- B. the final target after project closure
- C. a list of stakeholders on the project

D. the assigned control-chart centerline

13. Benefits of an improvement should be

- A. assumed from the effort invested
- B. reported only as anecdotes
- C. measured against the agreed baseline and goal
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14. Lead time usually includes

- A. only hands-on labor time
- B. only planned equipment downtime
- C. only the final inspection time
- D. both processing time and waiting time

15. A project champion typically

- A. collects every data point personally
- B. removes barriers and supports the project team
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16. A process map should normally begin with

- A. an agreed trigger and clear end point
- B. a completed corrective action report
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17. First-pass yield measures

- A. the number of process steps completed
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- A. separate facilities that make replacement parts
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- A. simple, managed, accurate, rapid, and tested
- B. standard, measured, approved, repeatable, and timely
- C. scoped, monitored, analyzed, revised, and tracked
- D. specific, measurable, achievable, relevant, and time-bound

21. Tampering occurs when someone

- A. adjusts a stable process for routine common-cause noise
- B. uses a control plan after a project
- C. checks a suspect measurement device
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- A. which cause is statistically significant
- B. who needs which information and when
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- A. asking operators to ignore process problems
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- A. adjust the process after every data point
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- A. customer, design, or regulatory requirements
- B. the average of recent process data
- C. the control-chart software package

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- A. reviewing only reports in a conference room
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- A. a problem statement, goal, scope, and roles
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- A. a person purchasing a product outside the company
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- A. middle ordered observation
- B. sum divided by the number of values
- C. distance from the mean to a limit
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- A. the sequence of process steps
- B. the distribution of numeric data
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41. A control chart is used to distinguish

- A. customer needs from process requirements
- B. value-added from nonvalue-added work
- C. short-term from long-term finance results
- D. common-cause variation from special-cause signals

42. Range is calculated as

- A. maximum value minus minimum value
- B. sum of all values divided by count
- C. middle value minus mean value
- D. number of defects divided by units

43. The 5 Whys technique aims to

- A. move from a symptom toward an underlying cause
- B. choose five projects for a department
- C. collect five observations per sample
- D. rank five suppliers by cost

44. Continuous data are data that

- A. are limited to whole-number counts
- B. can take any value within a measurement range
- C. cannot be measured by an instrument
- D. must be customer opinions

45. Batching can increase lead time because

- A. it automatically reduces setup time to zero
- B. it eliminates handoffs between steps
- C. it guarantees first-pass quality
- D. a unit waits for the rest of its batch

46. Special-cause variation is indicated by

- A. small random fluctuations within a stable pattern
- B. a target value set by the customer
- C. a signal suggesting something unusual affected the process
- D. a standard operating procedure

47. A well-written problem statement should avoid

- A. assuming the cause before evidence is gathered
- B. describing the affected process
- C. identifying the measurable gap
- D. stating where the problem occurs

48. Rework is harmful because it

- A. always increases customer value
- B. uses resources to correct work already performed
- C. eliminates the need for inspection
- D. makes process flow more visible

49. In an FMEA, severity estimates

- A. how often a failure has occurred
- B. how likely the failure is detected
- C. the number of operators affected
- D. the seriousness of the effect if failure occurs

50. A representative sample should

- A. reflect the conditions of the population being studied
- B. include only the easiest units to inspect
- C. exclude unusual times and locations
- D. be selected after results are known

51. In a SIPOC diagram, the letter I represents

- A. improvement ideas selected by leaders
- B. inspection points in the workflow
- C. inputs entering the process

D. information retained after closure

52. Defective refers to

- A. a single missed requirement only
- B. the total number of opportunities
- C. a unit containing one or more defects
- D. a unit sampled for inspection

53. In an FMEA, occurrence estimates

- A. the seriousness of the customer impact
- B. how easily the failure will be seen
- C. the duration of the project
- D. how frequently a failure cause is expected

54. A failure mode and effects analysis is used to

- A. show a process timeline
- B. anticipate failures and prioritize preventive action
- C. calculate a sample median
- D. collect customer survey responses

55. A pilot is used to

- A. replace all training during implementation
- B. test a change on a limited scale before full rollout
- C. prove that every root cause is gone
- D. avoid measuring the future-state process

56. Accuracy refers to how close a measurement is to

- A. the average of all operators
- B. the nearest specification limit
- C. the most common recorded value
- D. the accepted reference or true value

57. Common-cause variation is

- A. a one-time event outside normal operation
- B. a customer requirement that changed
- C. the natural variation built into a stable process
- D. an operator error that must be blamed

58. The first S in 5S focuses on

- A. sorting needed items from unnecessary items
- B. standardizing every customer requirement
- C. scheduling all preventive maintenance
- D. sustaining a weekly management review

59. A balanced set of measures may include

- A. only the metric that improved most
- B. only financial outcomes from leadership
- C. only the number of team meetings held
- D. quality, delivery, cost, and safety indicators

60. A process output that matters to the customer is called a

- A. random-cause signal
- B. critical-to-quality requirement
- C. nonvalue-added activity
- D. critical-to-quality characteristic

61. The median is the

- A. most frequently occurring value
- B. arithmetic average of all values
- C. middle value after data are ordered
- D. difference between largest and smallest values

62. Cycle time measures

- A. the elapsed time to complete one unit or task
- B. the time a unit waits in a queue only
- C. the time between project tollgates
- D. the time used to train a new employee

63. A visual workplace tool that labels locations and makes abnormalities obvious is

- A. FMEA
- B. 5S
- C. DOE
- D. QFD

64. A Pareto chart helps a team

- A. display every process step in sequence
- B. show the median of a data set
- C. focus on the few categories contributing most to a problem

D. calculate a confidence interval

65. A response plan is needed when

- A. a monitored measure signals unacceptable performance
- B. the project charter is first written
- C. a team begins brainstorming ideas
- D. a process map is drafted

66. A prioritization matrix is used to

- A. draw the physical layout of a workspace
- B. measure appraisal repeatability
- C. calculate defects per million
- D. compare options against agreed criteria

67. A run chart plots data

- A. in time order to reveal patterns or shifts
- B. by cause category from highest to lowest
- C. by department responsibility
- D. against only specification limits

68. Work in process inventory often increases

- A. the accuracy of a measurement system
- B. lead time and the visibility of flow problems
- C. the number of customers served per hour
- D. the stability of a control chart

69. In DMAIC, the Define phase mainly clarifies

- A. the final control plan and response plan
- B. the root cause confirmed by testing
- C. the capability index after improvements
- D. the problem, customers, and project goal

70. The 80/20 rule suggests that

- A. every cause contributes equally to an effect
- B. twenty defects always create eighty complaints
- C. a few causes often account for much of an effect
- D. eighty percent of work must be inspected

71. A cause should be treated as a verified root cause only after

- A. evidence shows changing it changes the problem
- B. a manager agrees it sounds plausible
- C. it appears first on a fishbone diagram
- D. it is mentioned by the most people

72. Control limits are calculated from

- A. customer requirements alone
- B. management preference alone
- C. the largest acceptable defect cost
- D. process data and expected variation

73. The best evidence that an improvement worked is

- A. a verbal report that people like the change
- B. a completed brainstorming list
- C. a before-and-after measure tied to the project goal
- D. a signed project charter

74. Measurement system variation can lead to

- A. automatic elimination of common causes
- B. incorrect conclusions about process performance
- C. a guaranteed increase in capability
- D. a complete process map

75. Brainstorming works best when participants first

- A. vote immediately on the first suggestion
- B. restrict ideas to management proposals
- C. require each idea to include a solution
- D. generate ideas without judging them

76. A pull system authorizes work based primarily on

- A. actual downstream demand
- B. the largest batch the machine can run
- C. the annual production forecast
- D. the inventory space available upstream

77. External customers are important because they

- A. always own the improvement project
- B. define value through needs and requirements
- C. set the process control limits directly

D. collect all production data

78. In an FMEA, detection estimates

- A. how much the failure will cost
- B. how frequently the cause appears
- C. how likely current controls will find the failure
- D. how long the product will last

79. A fishbone diagram is primarily used to

- A. select a random sample from a population
- B. compare two process averages
- C. organize possible causes of an effect
- D. create a daily production schedule

80. An affinity diagram helps a team

- A. calculate an average and standard deviation
- B. track a measure over time
- C. set engineering specifications
- D. group many ideas into meaningful themes

81. Which statement best describes a Six Sigma Yellow Belt?

- A. A sponsor who approves capital spending
- B. A team member who supports improvement work
- C. A master expert who leads every project
- D. An auditor who certifies supplier systems

82. A value stream map differs from a basic process map because it

- A. shows material and information flow with timing
- B. contains only customer requirements
- C. is used only for service processes
- D. cannot show waiting or inventory

83. Reproducibility concerns variation between

- A. repeated trials by one appraiser
- B. different units made by one machine
- C. the upper and lower specification
- D. different appraisers using the same method

84. The Measure phase should first ensure that

- A. the team defines operational measures clearly
- B. the solution is permanently standardized
- C. all root causes have been eliminated
- D. the project has closed financially

85. A stable process can still be

- A. free of any variation
- B. incapable of meeting specification requirements
- C. unmeasurable by a control chart
- D. guaranteed to improve without action

86. A spaghetti diagram is used to study

- A. the distribution of measurement error
- B. the trend of monthly defects
- C. movement of people, material, or information
- D. the hierarchy of project sponsors

87. The 8 wastes include all of the following except

- A. overproduction
- B. customer collaboration
- C. waiting
- D. defects

88. A scatter plot is useful for exploring

- A. the sequence of a workflow
- B. the most common defect category
- C. the correct sampling interval
- D. a possible relationship between two variables

89. A check sheet is designed to

- A. calculate the process capability ratio
- B. set a control limit automatically
- C. collect data consistently at the point of occurrence
- D. approve a corrective action

90. Correlation by itself does not prove

- A. that one variable causes the other
- B. that the variables can be plotted
- C. that a relationship might exist

D. that the data have units

91. Which is a value-added activity from the customer perspective?

- A. moving materials between storage locations
- B. assembling the product to required specifications
- C. waiting for an approval signature
- D. reentering information into another system

92. A nominal group technique combines

- A. individual idea generation with structured sharing and ranking
- B. random sampling with hypothesis testing
- C. process mapping with control limits
- D. inventory counting with demand forecasting

93. Standard work is most valuable because it

- A. eliminates the need for training
- B. guarantees a process has zero defects
- C. replaces all improvement experiments
- D. documents the current best known method

94. Project scope helps a team by

- A. proving the root cause is correct
- B. eliminating every stakeholder concern
- C. defining what is included and excluded
- D. selecting the final control chart

95. Discrete data are data that

- A. can take any value on a continuum
- B. are always collected by a survey
- C. must be displayed in a histogram
- D. take countable values such as number of defects

96. Operational definition means

- A. a precise, consistent rule for classifying or measuring
- B. a job description for an operator
- C. a policy for approving projects
- D. a list of possible root causes

97. When a team sees a problem, the first useful question is often

- A. who should be blamed immediately
- B. which solution costs the most
- C. what does the process evidence show
- D. how can data collection be skipped

98. Sampling is used when

- A. the process has no customers
- B. collecting every observation is impractical
- C. a team has already found the root cause
- D. all measurements are continuous

99. Kaizen refers to

- A. ongoing small improvements involving the people doing work
- B. a single large capital investment
- C. a statistical test of two averages
- D. a method for assigning belt roles

100. A bottleneck is the step that

- A. has the newest operating procedure
- B. has the lowest effective capacity
- C. contains the fewest work instructions
- D. has the highest employee satisfaction

101. In a Black Belt project, takt time is the rate needed to

- A. complete a project charter
- B. inspect every item at final audit
- C. meet customer demand with available production time
- D. calculate a process specification

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- B. collect five observations per sample
- C. rank five suppliers by cost
- D. move from a symptom toward an underlying cause

144. In a Black Belt project, continuous data are data that

- A. can take any value within a measurement range
- B. are limited to whole-number counts
- C. cannot be measured by an instrument
- D. must be customer opinions

145. In a Black Belt project, batching can increase lead time because

- A. it automatically reduces setup time to zero
- B. it eliminates handoffs between steps
- C. a unit waits for the rest of its batch
- D. it guarantees first-pass quality

146. In a Black Belt project, special-cause variation is indicated by

- A. small random fluctuations within a stable pattern
- B. a signal suggesting something unusual affected the process
- C. a target value set by the customer
- D. a standard operating procedure

147. In a Black Belt project, a well-written problem statement should avoid

- A. describing the affected process
- B. identifying the measurable gap
- C. stating where the problem occurs
- D. assuming the cause before evidence is gathered

148. In a Black Belt project, rework is harmful because it

- A. uses resources to correct work already performed
- B. always increases customer value
- C. eliminates the need for inspection
- D. makes process flow more visible

149. In a Black Belt project, in an FMEA, severity estimates

- A. how often a failure has occurred
- B. the seriousness of the effect if failure occurs
- C. how likely the failure is detected
- D. the number of operators affected

150. In a Black Belt project, a representative sample should

- A. include only the easiest units to inspect
- B. exclude unusual times and locations
- C. reflect the conditions of the population being studied
- D. be selected after results are known

Practice Exam 21: Answer Key and Explanations

- 1. B** — The correct response is A project leader who applies DMAIC and mentors teams. It reflects the Black Belt role, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 2. C** — The correct response is what is collected, by whom, when, and how. It reflects data collection planning, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 3. D** — The correct response is clearly defined and linked to a decision or goal. It reflects effective metrics, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 4. B** — The correct response is the closeness of repeated measurements to each other. It reflects precision, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 5. A** — The correct response is can affect or is affected by the project. It reflects stakeholders, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 6. C** — The correct response is displaying status and abnormalities where work occurs. It reflects visual management, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 7. B** — The correct response is arrival rate exceeds effective service capacity. It reflects queues, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 8. A** — The correct response is the same appraiser measures the same item repeatedly. It reflects repeatability, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 9. D** — The correct response is maximize customer value while reducing waste. It reflects the purpose of Lean, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

- 10. C** — The correct response is making more or earlier than the next process needs. It reflects overproduction, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 11. B** — The correct response is make the new method the normal way of working. It reflects standardization, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 12. A** — The correct response is the documented starting level before improvement. It reflects baselines, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 13. C** — The correct response is measured against the agreed baseline and goal. It reflects benefit tracking, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 14. D** — The correct response is both processing time and waiting time. It reflects lead time, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 15. B** — The correct response is removes barriers and supports the project team. It reflects the champion role, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 16. A** — The correct response is an agreed trigger and clear end point. It reflects process mapping, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 17. C** — The correct response is the proportion completed correctly without rework. It reflects first-pass yield, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 18. C** — The correct response is a potential special-cause signal requiring investigation. It reflects control-chart signals, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

- 19. D** — The correct response is extra activities created to fix errors and manage failures. It reflects hidden factories, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 20. D** — The correct response is specific, measurable, achievable, relevant, and time-bound. It reflects SMART goals, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 21. A** — The correct response is adjusts a stable process for routine common-cause noise. It reflects tampering, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 22. B** — The correct response is who needs which information and when. It reflects communication planning, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 23. C** — The correct response is involving those who do the work in improvements. It reflects respect for people, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 24. B** — The correct response is investigate it before changing the whole system. It reflects special-cause response, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 25. A** — The correct response is customer, design, or regulatory requirements. It reflects specification limits, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 26. D** — The correct response is observing the actual work where it happens. It reflects gemba walks, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 27. A** — The correct response is a problem statement, goal, scope, and roles. It reflects project charters, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

28. B — The correct response is a downstream person or function receiving process output. It reflects internal customers, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

29. D — The correct response is most frequently occurring value. It reflects the mode, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

30. C — The correct response is signal replenishment or authorize production. It reflects Kanban, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

31. B — The correct response is failure to meet a specified requirement. It reflects defects, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

32. C — The correct response is is accountable for ongoing process performance. It reflects process ownership, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

33. A — The correct response is what to monitor, how often, and the response to problems. It reflects control plans, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

34. D — The correct response is can consistently meet its specification limits. It reflects process capability, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

35. B — The correct response is prevent an error or make it immediately detectable. It reflects poka-yoke, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

36. D — The correct response is listening to needs and translating them into requirements. It reflects voice of the customer, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

37. C — The correct response is reducing the cost and delay of smaller batches. It reflects setup reduction, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

38. A — The correct response is define a process boundary at a high level. It reflects a SIPOC map, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

39. C — The correct response is work or information moves between people or functions. It reflects handoffs, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

40. B — The correct response is the distribution of numeric data. It reflects histograms, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

41. D — The correct response is common-cause variation from special-cause signals. It reflects control charts, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

42. A — The correct response is maximum value minus minimum value. It reflects range, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

43. A — The correct response is move from a symptom toward an underlying cause. It reflects 5 Whys, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

44. B — The correct response is can take any value within a measurement range. It reflects continuous data, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

45. D — The correct response is a unit waits for the rest of its batch. It reflects batching, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

- 46. C** — The correct response is a signal suggesting something unusual affected the process. It reflects special causes, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 47. A** — The correct response is assuming the cause before evidence is gathered. It reflects problem statements, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 48. B** — The correct response is uses resources to correct work already performed. It reflects rework, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 49. D** — The correct response is the seriousness of the effect if failure occurs. It reflects FMEA severity, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 50. A** — The correct response is reflect the conditions of the population being studied. It reflects representative samples, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 51. C** — The correct response is inputs entering the process. It reflects SIPOC elements, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 52. C** — The correct response is a unit containing one or more defects. It reflects defectives, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 53. D** — The correct response is how frequently a failure cause is expected. It reflects FMEA occurrence, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 54. B** — The correct response is anticipate failures and prioritize preventive action. It reflects FMEA, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

- 55. B** — The correct response is test a change on a limited scale before full rollout. It reflects piloting changes, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 56. D** — The correct response is the accepted reference or true value. It reflects accuracy, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 57. C** — The correct response is the natural variation built into a stable process. It reflects common causes, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 58. A** — The correct response is sorting needed items from unnecessary items. It reflects the first 5S step, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 59. D** — The correct response is quality, delivery, cost, and safety indicators. It reflects balanced measures, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 60. B** — The correct response is critical-to-quality requirement. It reflects customer requirements, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 61. C** — The correct response is middle value after data are ordered. It reflects the median, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 62. A** — The correct response is the elapsed time to complete one unit or task. It reflects cycle time, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 63. B** — The correct response is 5S. It reflects 5S, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action. It guides disciplined daily work.

- 64. C** — The correct response is focus on the few categories contributing most to a problem. It reflects Pareto analysis, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 65. A** — The correct response is a monitored measure signals unacceptable performance. It reflects response plans, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 66. D** — The correct response is compare options against agreed criteria. It reflects prioritization matrices, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 67. A** — The correct response is in time order to reveal patterns or shifts. It reflects run charts, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 68. B** — The correct response is lead time and the visibility of flow problems. It reflects work in process, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 69. D** — The correct response is the problem, customers, and project goal. It reflects the Define phase, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 70. C** — The correct response is a few causes often account for much of an effect. It reflects Pareto thinking, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 71. A** — The correct response is evidence shows changing it changes the problem. It reflects root-cause verification, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 72. D** — The correct response is process data and expected variation. It reflects control limits, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

73. C — The correct response is a before-and-after measure tied to the project goal. It reflects improvement validation, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

74. B — The correct response is incorrect conclusions about process performance. It reflects measurement systems, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

75. D — The correct response is generate ideas without judging them. It reflects brainstorming, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

76. A — The correct response is actual downstream demand. It reflects pull systems, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

77. B — The correct response is define value through needs and requirements. It reflects external customers, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

78. C — The correct response is how likely current controls will find the failure. It reflects FMEA detection, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

79. C — The correct response is organize possible causes of an effect. It reflects cause-and-effect analysis, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

80. D — The correct response is group many ideas into meaningful themes. It reflects affinity diagrams, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

81. B — The correct response is A team member who supports improvement work. It reflects the Yellow Belt role, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

82. A — The correct response is shows material and information flow with timing. It reflects value stream mapping, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

83. D — The correct response is different appraisers using the same method. It reflects reproducibility, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

84. A — The correct response is the team defines operational measures clearly. It reflects the Measure phase, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

85. B — The correct response is incapable of meeting specification requirements. It reflects stability versus capability, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

86. C — The correct response is movement of people, material, or information. It reflects spaghetti diagrams, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

87. B — The correct response is customer collaboration. It reflects Lean wastes, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

88. D — The correct response is a possible relationship between two variables. It reflects scatter plots, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

89. C — The correct response is collect data consistently at the point of occurrence. It reflects check sheets, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

90. A — The correct response is that one variable causes the other. It reflects correlation, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

- 91. B** — The correct response is assembling the product to required specifications. It reflects value-added work, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 92. A** — The correct response is individual idea generation with structured sharing and ranking. It reflects nominal group technique, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 93. D** — The correct response is documents the current best known method. It reflects standard work, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 94. C** — The correct response is defining what is included and excluded. It reflects project scope, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 95. D** — The correct response is take countable values such as number of defects. It reflects discrete data, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 96. A** — The correct response is a precise, consistent rule for classifying or measuring. It reflects operational definitions, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 97. C** — The correct response is what does the process evidence show. It reflects evidence-based improvement, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 98. B** — The correct response is collecting every observation is impractical. It reflects sampling, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.
- 99. A** — The correct response is ongoing small improvements involving the people doing work. It reflects kaizen, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

100. B — The correct response is has the lowest effective capacity. It reflects bottlenecks, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

101. C — The correct response is meet customer demand with available production time. It reflects takt time, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

102. D — The correct response is what is collected, by whom, when, and how. It reflects data collection planning, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

103. C — The correct response is clearly defined and linked to a decision or goal. It reflects effective metrics, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

104. D — The correct response is the closeness of repeated measurements to each other. It reflects precision, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

105. A — The correct response is can affect or is affected by the project. It reflects stakeholders, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

106. B — The correct response is displaying status and abnormalities where work occurs. It reflects visual management, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

107. A — The correct response is arrival rate exceeds effective service capacity. It reflects queues, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

108. C — The correct response is the same appraiser measures the same item repeatedly. It reflects repeatability, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

109. D — The correct response is maximize customer value while reducing waste. It reflects the purpose of Lean, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

110. B — The correct response is making more or earlier than the next process needs. It reflects overproduction, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

111. A — The correct response is make the new method the normal way of working. It reflects standardization, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

112. D — The correct response is the documented starting level before improvement. It reflects baselines, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

113. B — The correct response is measured against the agreed baseline and goal. It reflects benefit tracking, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

114. C — The correct response is both processing time and waiting time. It reflects lead time, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

115. B — The correct response is removes barriers and supports the project team. It reflects the champion role, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

116. D — The correct response is an agreed trigger and clear end point. It reflects process mapping, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

117. A — The correct response is the proportion completed correctly without rework. It reflects first-pass yield, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

118. C — The correct response is a potential special-cause signal requiring investigation. It reflects control-chart signals, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

119. B — The correct response is extra activities created to fix errors and manage failures. It reflects hidden factories, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

120. A — The correct response is specific, measurable, achievable, relevant, and time-bound. It reflects SMART goals, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

121. C — The correct response is adjusts a stable process for routine common-cause noise. It reflects tampering, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

122. D — The correct response is who needs which information and when. It reflects communication planning, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

123. B — The correct response is involving those who do the work in improvements. It reflects respect for people, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

124. A — The correct response is investigate it before changing the whole system. It reflects special-cause response, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

125. C — The correct response is customer, design, or regulatory requirements. It reflects specification limits, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

126. C — The correct response is observing the actual work where it happens. It reflects gemba walks, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

127. D — The correct response is a problem statement, goal, scope, and roles. It reflects project charters, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

128. D — The correct response is a downstream person or function receiving process output. It reflects internal customers, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

129. A — The correct response is most frequently occurring value. It reflects the mode, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

130. B — The correct response is signal replenishment or authorize production. It reflects Kanban, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

131. C — The correct response is failure to meet a specified requirement. It reflects defects, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

132. B — The correct response is is accountable for ongoing process performance. It reflects process ownership, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

133. A — The correct response is what to monitor, how often, and the response to problems. It reflects control plans, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

134. D — The correct response is can consistently meet its specification limits. It reflects process capability, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

135. B — The correct response is prevent an error or make it immediately detectable. It reflects poka-yoke, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

136. C — The correct response is listening to needs and translating them into requirements. It reflects voice of the customer, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

137. D — The correct response is reducing the cost and delay of smaller batches. It reflects setup reduction, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

138. A — The correct response is define a process boundary at a high level. It reflects a SIPOC map, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

139. B — The correct response is work or information moves between people or functions. It reflects handoffs, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

140. C — The correct response is the distribution of numeric data. It reflects histograms, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

141. A — The correct response is common-cause variation from special-cause signals. It reflects control charts, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

142. D — The correct response is maximum value minus minimum value. It reflects range, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

143. D — The correct response is move from a symptom toward an underlying cause. It reflects 5 Whys, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

144. A — The correct response is can take any value within a measurement range. It reflects continuous data, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

145. C — The correct response is a unit waits for the rest of its batch. It reflects batching, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

146. B — The correct response is a signal suggesting something unusual affected the process. It reflects special causes, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

147. D — The correct response is assuming the cause before evidence is gathered. It reflects problem statements, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

148. A — The correct response is uses resources to correct work already performed. It reflects rework, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

149. B — The correct response is the seriousness of the effect if failure occurs. It reflects FMEA severity, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.

150. C — The correct response is reflect the conditions of the population being studied. It reflects representative samples, a foundational Lean Six Sigma concept. The other choices name different tools, roles, or measures and do not directly answer the stem. A Black Belt connects terms to practical process improvement, customer value, and evidence-based decisions before recommending consistent action.