

## Lean Six Sigma Green Belt Professional Certification (LSSGBPC)

### Supporting Questions V052019

1. What tool is used to evaluate a measurement system?
  - a) Cost of poor quality (COPQ).
  - b) Metrics.
  - c) Customer requirements.
  - d) Gage R&R Studio.
  
2. What tool is used to prioritize input and output variables?
  - a) Cause-effect matrix.
  - b) CTQ.
  - c) Process map.
  - d) VOC.
  
3. Inferential statistics determine properties:
  - a) To sample a population.
  - b) To characterize the data coming from a population.
  - c) To obtain trends.
  - d) Of a population by means of induction.
  
4. What are the types of data in basic statistics?
  - a) Variable and sub-variables.
  - b) Explicit and implicit.
  - c) Variables and continuous.
  - d) Discrete and continuous.
  
5. What are the measures of statistical dispersion?
  - a) Range, variance, and standard deviation.
  - b) Mode, median, and mean.
  - c) Median and mean of means.
  - d) Average, value, and frequency.

6. What are the elements of the Gage R&R study?
  - a) Reproducibility and reactivity.
  - b) Resolution and repetition.
  - c) Repeatability and reproducibility.
  - d) All of the above.
  
7. Who is the father of the Six Sigma methodology?
  - a) Taiichi Ohno.
  - b) Henry Ford.
  - c) Eduard Deming.
  - d) Bill Smith.
  
8. What is the objective of Six Sigma?
  - a) Data analysis.
  - b) Reduction of variability.
  - c) Improve processes.
  - d) All of the above.
  
9. What are the independent variables called?
  - a) Variable inputs (x).
  - b) Variable outputs (y).
  - c) Symptoms 1, and 2.
  - d) Monitor, output (y).
  
10. What is the meaning of DPMO?
  - a) Potential deviation per million opportunities.
  - b) Defects per million opportunities.
  - c) Differences per million opportunities.
  - d) Deviations per million opportunities.
  
11. What is the value of defects per million opportunities at a Six Sigma level?
  - a) 3.1416 defects per million.
  - b) 3.05 defects per million.
  - c) 3.15 defects per million.
  - d) 3.4 defects per million.

12. Which tool is used in the Analyze phase?
- a) Project Charter.
  - b) DOE.
  - c) FMEA.
  - d) All of the above.
13. In the FMEA study, what does RPN mean?
- a) Reason priority number.
  - b) Risk priority number.
  - c) Risk principal number.
  - d) Risk potential number.
14. What is the RPN calculation?
- a) Add occurrence, add detection, and add severity.
  - b) Multiply severity and detection plus occurrence.
  - c) Add occurrence, multiply by detection, and add severity.
  - d) Product of multiplying severity, occurrence, and detection.
15. What type of distribution is the example of flipping a coin and coming up "heads" or "tails"?
- a) Normal.
  - b) Binomial.
  - c) Poisson.
  - d) Abnormal.
16. What are the elements of hypothesis testing?
- a) Hypothesis Y and hypothesis Z.
  - b) Hypothesis A and Hypothesis B.
  - c) False hypothesis and true hypothesis.
  - d) Null hypothesis and alternative hypothesis.

17. What does CTQ stands for?
- a) Critical to Quality.
  - b) Critical Technique Quality.
  - c) Crossed to Quality.
  - d) All of the above.
18. What are the elements of the Project Charter?
- a) Solution of the problem and title.
  - b) Title and development.
  - c) Objective and savings.
  - d) Bussiness Y & bussiness Z.
19. What is the definition of defect?
- a) Accepted feature.
  - b) A single feature that does not meet the requirement.
  - c) More than two characteristics that do not meet the requirement.
  - d) Features that do not meet an objective.
20. What control charts should be developed if you have discrete data?
- a) P, NP, C and U.
  - b) P, H, PP and CPK.
  - c) CP, CPK, CPU and U.
  - d) CP, NC, C and U.
21. What is the classification of the specification limits?
- a) Large limit, small limit, and deviation.
  - b) Upper, lower, and standard limit.
  - c) Upper, lower, and mean limit.
  - d) All of the above.
22. What does SPC stands for?
- a) Specific control of parameters.
  - b) Statistical process control.
  - c) Statistical control of people.
  - d) Statistical control of preferences.

23. What are the 3 pillars of data control?
- a) Standardize the process, document the process, and monitor the process.
  - b) Standardize the instrument, document the process, and monitor the process.
  - c) Standardize the instrument, document the process, and monitor deviations.
  - d) Statistical control of preferences.
24. What does VSM stands for?
- a) Value Stream Mapping.
  - b) Value Standard Mock.
  - c) Value Stream Max.
  - d) Visual Stream Mapping.

## Answers

- 1.D
- 2.A
- 3.D
- 4.D
- 5.A
- 6.C
- 7.D
- 8.D
- 9.A
- 10.B
- 11.D
- 12.C
- 13.B
- 14.D
- 15.B
- 16.D
- 17.A
- 18.C
- 19.B
- 20.A
- 21.C
- 22.B
- 23.A
- 24.A