ASQ CSSBB

Six Sigma Black Belt Certification

Version: 4.0

Topic 1, Volume A

QUESTION NO: 1

SWOT is an acronym for:

A. strengths, weaknesses, opportunities, threats
B. statistics without tables
C. sensory Weibull ordinal tools
D. success wields optimal teams E. none of the above

Answer: A
Explanation:

QUESTION NO: 2

Perform a risk analysis to determine the expected profit or (loss) from a project which has four possible disjoint outcomes: Outcome A shows a profit of $340,000 and has a probability of 0.25 Outcome B shows a profit of $120,000 and has a probability of 0.40 Outcome C shows a loss of $40,000 and has a probability of 0.10 Outcome D shows a profit of $100,000 and has a probability of 0.25

A. $130,000
B. $520,000
C. $154,000
D. ($168,000)
E. none of the above

Answer: C
Explanation:

QUESTION NO: 3

The leader in the quality movement who recommended that organizations “eliminate numerical quotas for the work force and numerical goals for management.” :

A. Juran
B. Ishikawa
C. Crosby
D. Feigenbaum

E. Taguchi
F. none of the above

Answer: F
Explanation:

QUESTION NO: 4

The quality leader responsible for the term Total Quality Management (TQM):

A. Juran
B. Ishikawa
C. Crosby
D. Feigenbaum
E. Taguchi
F. none of the above

Answer: D
Explanation:

QUESTION NO: 5

The quality leader most associated with the concept of robustness:

A. Juran
B. Ishikawa
C. Crosby
D. Feigenbaum
E. Taguchi
F. none of the above

Answer: E
Explanation:

QUESTION NO: 6

The support for an important quality initiative was lacking in congress until Reagan's Secretary of Commerce was killed in a horseback riding accident in 1987. That initiative was:

A. assigning National Institute for Standards and Technology (NIST) quality oversight duties
B. "consensus of the House" proclamation for Deming's 14 points

C. changing National Bureau of Standards to NIST.
D. authorizing the American National Standards Institute (ANSI) to join with the International Standards Organization (ISO) to promulgate standards.
E. none of the above.

Answer: E

Explanation:

QUESTION NO: 7

A quality leader who did extensive work with Japanese industry is:

A. Juran
B. Ishikawa
C. Deming
D. Ohno
E. Taguchi
F. all of the above
G. none of the above

Answer: F

Explanation:

QUESTION NO: 8

In a series of linked processes and associated feedback loops the product or service flows _____ and the information flows _____.

A. rapidly, slower
B. downstream, upstream
C. evenly, digitally
D. sooner, later
E. to the customer, from the supplier
F. none of the above

Answer: B

QUESTION NO: 9

Causes in a cause and effect diagram often include management, measurement systems, mother nature and the four standard causes:

A. man, material, methods, machines
B. man, manufacturing, methods, material
C. marketing, methods, material, machines
D. man, material, millennium, machines
E. none of the above

Answer: A
Explanation:

QUESTION NO: 10

The word “champion” in the context of Six Sigma projects refers to:

A. the team that has had the most impact on the bottom line.
B. the person who has coordinated teams most effectively
C. the individual who has outpaced all others in six sigma knowledge
D. none of the above

Answer: D
Explanation:

QUESTION NO: 11

George is an employee of Black, Inc. John is George’s internal customer. Which statement is true?

A. John is employed by Black, Inc.
B. John is employed by another company that supplies material to Black, Inc.
C. John is employed by a company that purchases material from black, Inc.
D. John is employed by another company that has a fiduciary agreement with Black, Inc.
E. John is employed by another company as an internal auditor.

Answer: A
Explanation:

QUESTION NO: 12

A team has been asked to reduce the cycle time for a process. The team decides to collect baseline data. It will do this by:

A. seeking ideas for improvement from all stakeholders
B. researching cycle times for similar processes within the organization

C. obtaining accurate cycle times for the process as it currently runs
D. benchmarking similar processes outside the organization

Answer: C
Explanation:

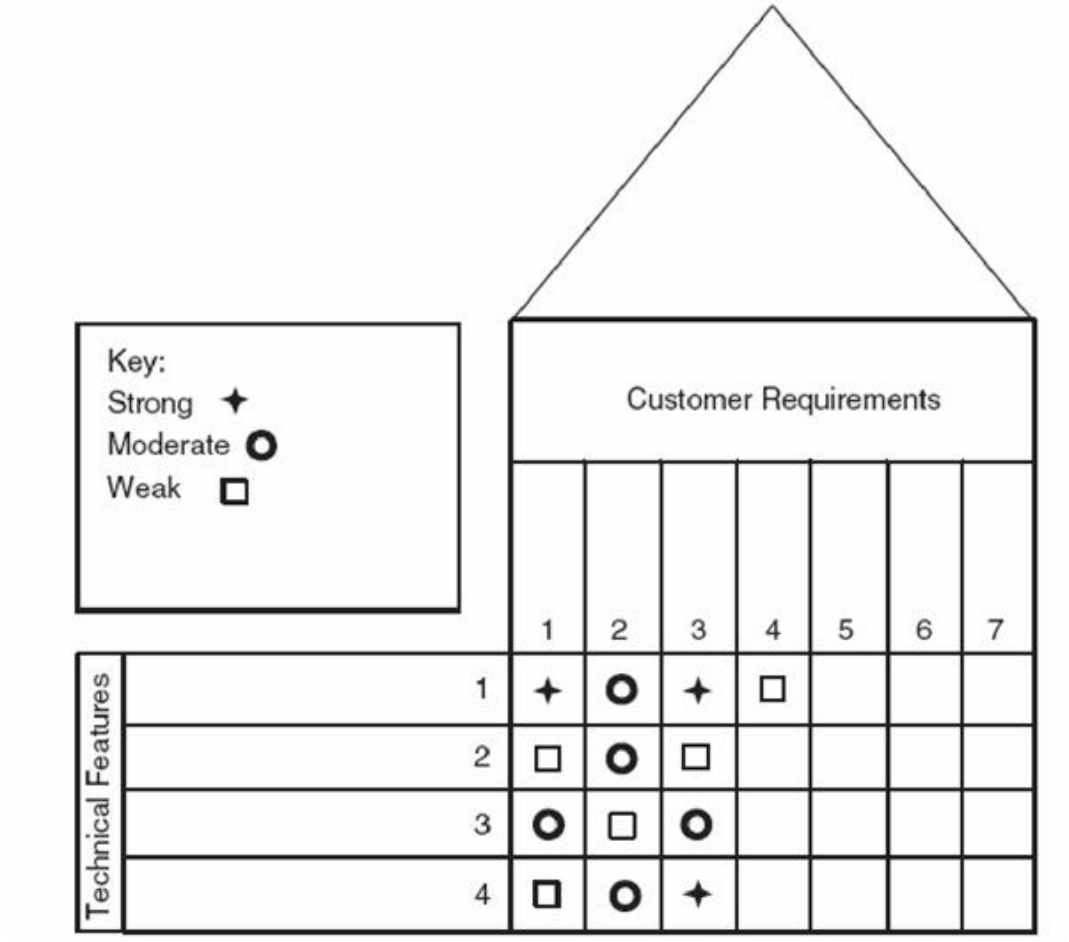
QUESTION NO: 13

Customer segmentation refers to:

A. dividing a particular customer into parts that are more easily understood
B. grouping customers by one or more criteria
C. maintaining secure customer listings to minimize communication among them
D. eliminating or “cutting off” customers with poor credit history

Answer: B
Explanation:

QUESTION NO: 14



This is an example of part of a:

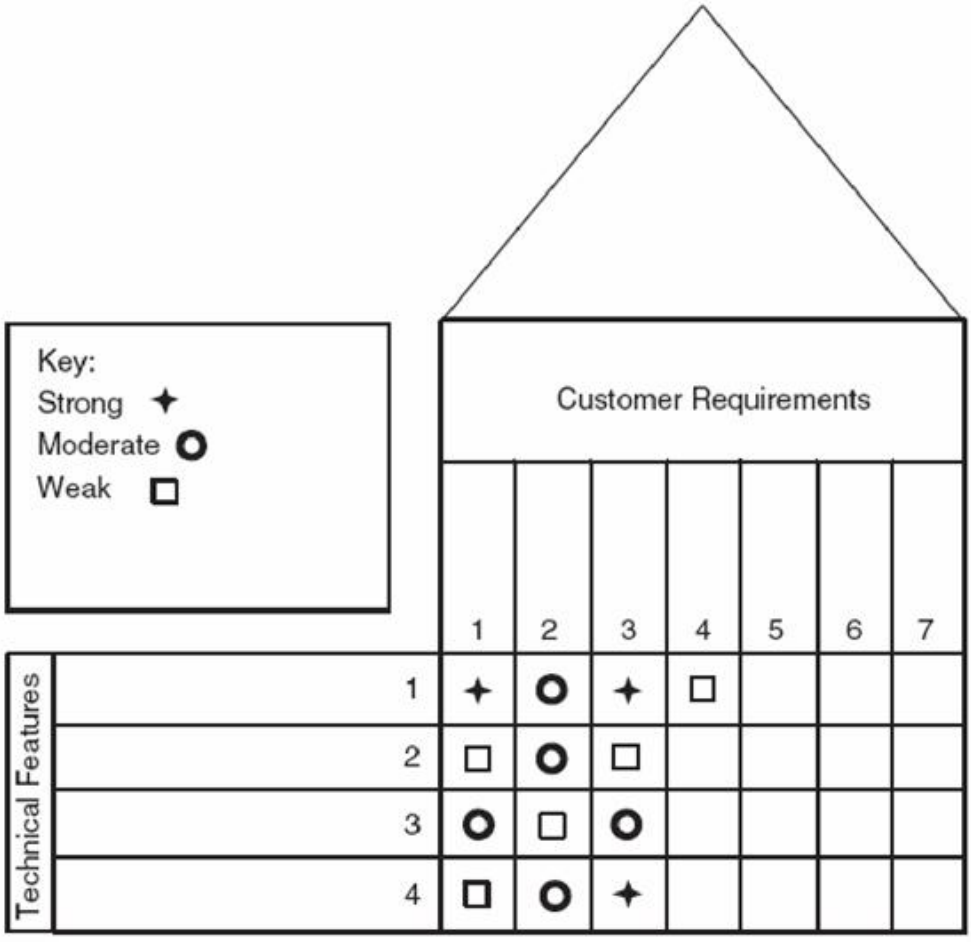
A. QFD Matrix
B. Activity Network Diagram
C. Interrelationship Diagram
D. Affinity Diagram

Answer: A

Explanation:

QUESTION NO: 15

Customer requirement #3 has a _____ relationship with technical feature #3.



A. strong
B. moderate
C. weak

Answer: B

Explanation:

QUESTION NO: 16

There are 14 different defects that can occur on a completed time card. The payroll department collects 328 cards and finds a total of 87 defects. DPU =

A. 87 ÷ 328
B. 87 ÷ (328 × 14)
C. 14 ÷ 87
D. 87 ÷ 14
E. 328 ÷ 87
F. 87 × 1,000,000 ÷ (14 × 328)

Answer: A
Explanation:

QUESTION NO: 17

There are 14 different defects that can occur on a completed time card. The payroll department collects 328 cards and finds a total of 87 defects. DPMO =:

A. 87 ÷ 328
B. 87 ÷ (328 × 14)
C. 14 ÷ 87
D. 87 ÷ 14 × 1,000,000
E. 328 ÷ 87
F. 87 × 1,000,000 ÷ (14 × 328)

Answer: F
Explanation:

QUESTION NO: 18

A random sample of 2500 printed brochures is found to have a total of three ink splotches. The rate of ink splotches in PPM is:

A. 1,000,000 ÷ 2500 × 3
B. 2500 ÷ 1,000,000 × 3
C. 3 ÷ 2500 × 1,000,000
D. 3 × 2500 ÷ 1,000,000

Answer: C
Explanation:

QUESTION NO: 19

If DPU = 0.022, the RTU is approximately:

A. 0.022
B. 0.078
C. 0.0022
D. 0.98 E. 0.098
E. 0.0098

Answer: D
Explanation:

QUESTION NO: 20

A project activity not on the critical path has required 20% longer than the time originally allocated. The project team should:

A. inform all concerned that the entire project will be delayed by 20%
B. inform all concerned that the entire project will be delayed but by less than 20%
C. study the effect this will have on other activities because the project may still be on schedule

Answer: C
Explanation:

QUESTION NO: 21

After a team has engaged in diversion activities they may need to employ a tool for conversion. Examples of such a tool are: I. nominal group technique II. multivoting III. cause and effect diagram IV. activity network diagram V. matrix diagrams

A. III and IV
B. IV and V
C. II and III
D. I and II

Answer: D
Explanation:

QUESTION NO: 22

A team studies a coil steel banding process and makes five changes resulting in productivity improvements of 2%, 2.8%, 2.4%, 2% and 3% respectively. These improvements are best described by which approach to problem solving?

A. 5S
B. Poka yoke
C. Kaizen
D. PDCA
E. Re-engineering

Answer: C
Explanation:

QUESTION NO: 23

The operators of a manufacturing cell work out a more orderly arrangement for tool storage and establish a schedule to maintain cleanliness on a daily basis. These improvements are best described by which approach to problem solving?

A. 5S
B. Poka yoke
C. Kaizen
D. PDCA
E. Re-engineering

Answer: A
Explanation:

QUESTION NO: 24

A quality engineer employed by a hospital is asked to improve the process of medication storage in locked cabinets near patient doors. One defect that occurs rarely is that the medication caddy is left out when the cabinet is relocked. The engineer installs a gravity activated arm that will not permit the door to close when the caddy isn't inside. This improvement is best described by which approach to problem solving?

A. 5S
B. Poka yoke