

Question 1. (Single Select)

To calculate process capability of non-normal data a Box-Cox transformation is used with a lambda = 0.5. What would be the effect on the USL of 16 in the transformed graph?

Response:

- A: Remains at 16
- B: Changed to 256
- C: Changed to 8
- D: Changed to 4

Correct Answer: B

Question 2. (Single Select)

Why is visualization of data useful?

Response:

- A: Visualization enables the organization to be 80% correct today, rather than 100% correct in 6 months.
- B: Visualization makes it possible to draw conclusions from a large amount of data.
- C: Visualization encourages out-of-the-box thinking to generate as many ideas as possible.
- D: Visualization identifies and eliminates the root cause of faults or problems.

Correct Answer: D

Question 3. (Single Select)

What is the best way to measure the 'on-time' performance of the national railways?

Response:

- A: Calculate the difference between the scheduled departure time and the actual departure time

over a period of a month

- B: Check the internet to record the departure time for each train over a period of a month
- C: Record the number of trains that left at the scheduled departure time over a period of a day
- D: Record the number of trains that left at the scheduled departure time over a period of a month

Correct Answer: A

Question 4. (Single Select)

The design for a new camera is being developed. When applying Designing for Excellence (DfX), which element is not a relevant factor?

Response:

- A: How strong the camera casing should be to protect the camera lens
- B: The number of pixels of the camera sensor
- C: Whether the camera settings and buttons are easy to use and understand
- D: Whether parts from other designs are being considered to use

Correct Answer: B

Question 5. (Single Select)

Which statement does not describe a 'lessons learned' from an improvement project?

Response:

- A: A company facing increasing pressure to cut costs and speed up lead times must implement internal controls and invest in new technology.
- B: Advice from the Ministry of Trade and Industry indicates that drawing up a contract is a lengthy process, and that compensation should be paid.
- C: The purchasing department's experience indicates that delays usually occur when contracts with third-party suppliers do not include a time frame within which delivery for the service is expected.

D: Two companies that provided technical support and that proved to be unreliable in other projects will not be identified as potential service providers.

Correct Answer: A