

Version: 6.0

Question: 1

Rbi may include methodologies to assess the effectiveness of the management systems in maintaining

- A. Mechanical integrity
- B. Total asset integrity
- C. Plant integrity

Answer: A

Question: 2

Equipment reliability is especially important if leaks can be caused by

- A. Secondary failures, such as loss of utilities
- B. Primary failures such as leak due to severe corrosion
- C. Tertiary failures due to valve gland packing leak

Answer: B

Question: 3

Reliability efforts, such as reliability centered maintenance (rem), can be linked with rbi, resulting in an integrated program to

- A. Reduce downtime in an operating unit
- B. Reduce operating time of a unit
- C. To reduce risk by mitigation activities

Answer: A

Question: 4

In jurisdictions that permit the application of the API Inspection Codes and standards

- A. Rbi should be an acceptable method for setting inspection plans.
- B. Rem should be an acceptable method for setting the inspection plans
- C. Pha

Answer: A

Question: 5

_____to be established to judge acceptability of risk could be an objective of the rbi assessment if such criteria do not exist already within the user's company.

- A. Risk criteria
- B. Risk plan
- C. Risk analysis

Answer: A

Question: 6

_____is usually not the primary objective of a rbi assessment, but it is frequently a side effect of optimization.

- A. Reducing inspection costs
- B. Increasing inspection costs
- C. Increasing frequency of inspection programs

Answer: A

Question: 7

When the inspection program is optimized based on an understanding of risk, one or more of the following cost reduction benefits may be realized. Except one

- A. Ineffective, unnecessary or inappropriate inspection activities may be eliminated
- B. Effective, necessary or appropriate inspection activities may be eliminated
- C. On-line or non-invasive inspection methods may be substituted for invasive methods that require equipment shutdown
- D. More effective infrequent inspections may be substituted for less effective frequent inspections

Answer: B

Question: 8

The following are the risks identified by rbi assessment that may be managed by actions other than inspection. Except one

- A. Modification of the process to eliminate conditions driving the risk
- B. Modification of operating procedures to avoid situations driving the risk
- C. Chemical treatment of the process to reduce deterioration rates/susceptibilities
- D. Identifying and detecting deterioration and predicting future deterioration states with advanced inspection technique(s)

Answer: D

Question: 9

For qualitative rbi analysis it is important to establish a set of rules to assure consistency in

- A. Categorization or classification
- B. Segregation
- C. Ranking

Answer: A

Question: 10

Generally, a qualitative analysis using broad ranges requires a _____ from the user than a quantitative approach.

- A. Higher level of judgment, skill and understanding
- B. Lower level of judgment, skill and understanding

Answer: A

Question: 11

The models are evaluated _____ to provide both qualitative and quantitative insights about the level of risk and to identify the design, site, or operational characteristics that are the most important to risk

- A. Probabilistically
- B. Statistically
- C. Linearly
- D. Logically

Answer: D

Question: 12

Potential source of errors in rbi analysis regarding data quality are the following except

- A. If the base line thickness were not performed the nominal thickness may be used for the original thickness
- B. If original thickness not available, averaged thickness readings may be used
- C. If the original thickness not available, maximum thickness readings may be used

Answer: A

Question: 13

Potential source of errors in rbi analysis regarding data quality are the following except

- A. Assumptions in equipment history
- B. Outdated drawings and documentation
- C. Inspector error
- D. Advanced inspection methods

Answer: D

Question: 14

The following assumption can be made that significantly impact the calculated corrosion rate early in the equipment life

- A. If the base line thickness were not performed the nominal thickness may be used for the original thickness
- B. If original thickness not available, averaged ut thickness readings may be used
- C. If the original thickness not available, maximum ut thickness readings may be used

Answer: A
