## Question: 1

What relationship should Maintenance and Reliability Teams have with customers and suppliers for optimum effectiveness?

Please choose the correct answer.

- A. Purchasing should be the only communicators with suppliers
- B. Management should be the only communicators with customers and suppliers
- C. Team members should be involved in communicating with customers and suppliers
- D. Sales should be the only department communicating with customers.

**Answer: C** 

#### Question: 2

Which list of elements below are the most important to be evaluated and coordinated during the planning phase of a major shutdown of your operating area (i.e. annual turnaround)? Please choose the correct answer.

- A. Historical turnaround maintenance days, operations desired work list, prior turnaround work lists
- B. Available turnaround budget, equipment condition, budgeted down-days
- C. Condition and remaining life of critical equipment, value of production throughput, labor and materials availability and cost
- D. Heavy lifting equipment availability, labor cost and availability, operations requested down-days

**Answer: A** 

# **Question: 3**

What is the statistical average and the population standard deviation of the following series of numbers? 1.30, 1.25, 1.50, 1.12, 1.35, 1.38 Please choose the correct answer.

- A. Statistical average = 1.32; standard deviation = 0.128
- B. Statistical average = 1.50; standard deviation= 0.25
- C. Statistical average = 1.32; standard deviation= 1.50
- D. Statistical average = 0.128: standard deviation= 1.32

Answer: A

## Question: 4

What is the relationship between leading indicator metrics and lagging indicator metrics in the field of Maintenance and Reliability?

Please choose the correct answer.

- A. Lagging indicators are measures that reflect accomplishment of goals, while leading indicators are measures of what must be done to improve results.
- B. Leading indicators are measures that reflect accomplishment of goals while lagging indicators are measures of what must be done to improve results.
- C. Leading indicators are low level measures that reflect accomplishment of goals, while lagging indicators are measures of what must be done to improve results.
- D. Leading indicators are used by management, while lagging indicators are used by personnel on the shop floor.

Answer: B

### **Question: 5**

As the maintenance manager at a new plant (facility) you are developing the maintenance workforce strategy for start-up. Select the best workforce attributes for maximum effectiveness, assuming that unit labor costs are equal?

Please choose the correct answer.

- A. An annual bid and selection of a maintenance labor contractor is performed, using unitcosting of tasks normally required.
- B. A managing contractor is brought on site to handle all aspects and provision of maintenance labor.
- C. Multi skilled mechanical crafts (trades) and instrument electrical crafts (trades) are hired and developed.
- D. Operations performing minor maintenance and company multi-skilled technicians performing complex maintenance tasks.

**Answer: D**