

# APICS

## Exam CPIM-ECO

### Execution and Control of Operations

Version: 7.0

[ Total Questions: 105 ]

**Question No : 1**

A company produces a part with a nominal diameter of 2.0 inches and a tolerance of  $\pm 0.006$  with a standard deviation of 0.001 inches. A sample has the average diameter of 1.996 inches with a standard deviation of 0.001 inches. What is the CPK and process capability?

- A. 0.667, capable
- B. 0.667, not capable
- C. 0.333, capable
- D. 0.333, not capable

**Answer: B**

**Question No : 2**

Small-group improvement activities are most effective when the:

- A. group is guided by a professional facilitator.
- B. group focuses on solvable problems.
- C. machine operators are required to participate.
- D. company's industrial engineers participate.

**Answer: B**

**Question No : 3**

Group technology identifies the common characteristics of parts on the basis of which of the following factors?

- A. Yields
- B. Processes
- C. Source
- D. Costs

**Answer: B**

**Question No : 4**

What management approach is based on the participation of all members of an organization in improving processes, and culture in which they work?

- A. Total Quality Control
- B. Total Quality Engineering
- C. Total Quality Management
- D. Total Waste Management

**Answer: C**

**Question No : 5**

When addressing the storage and movement of inventory in a push system, it would be important to consider:

- A. orders that are issued without regard for needs of other warehouses.
- B. projected requirements for all warehouses and direct sales.
- C. the need to increase warehouse levels of safety stock.
- D. elimination of central control of inventory allocation.

**Answer: B**

**Question No : 6**

To decrease time to market for discrete products, it is most effective to improve which of the following phases?

- A. Product definition
- B. Product design
- C. Production
- D. Distribution

**Answer: B**

**Question No : 7**

Reducing design cycle time improves which of the following measures?

- A. Production throughput
- B. Return on investment (ROI)
- C. Manufacturability
- D. Quality

**Answer: B**

**Question No : 8**

To reduce the cost of transaction processing, a repetitive manufacturer first would implement:

- A. inventory staging.
- B. a point-of-sale system.
- C. point-of-use storage.
- D. cycle counting.

**Answer: C**

**Question No : 9**

The next job to be performed was selected because it had the least amount of operation time prior to the due date. Which of the following priority sequencing rules was being used?

- A. Slack time per operation
- B. Shortest operation time
- C. Critical ratio
- D. Slack time per order

**Answer: B**

**Question No : 10**

Control charts are used to do which of the following?

- A. Determine preventative maintenance schedules
- B. Display variation of the production process

- C. Determine the percentage of output within specification limits
- D. Verify ongoing process capability

**Answer: B**

**Question No : 11**

One of the main benefits of the A3 problem solving method is:

- A. coaching.
- B. a statistical approach.
- C. a kaizen event.
- D. voice-of-the-customer data.

**Answer: A**

**Question No : 12**

Based on the data provided, assume that time available per day is 840 minutes. What is the takt time per unit of demand?

<u>Days</u>	<u>Daily Demand</u>
1	30
2	40
3	50
4	60
5	10
6	30
7	40
8	20
9	60
10	40
	380

- A. 84.0 minutes
- B. 22.1 minutes

- C. 2.21 minutes
- D. 8.4 minutes

**Answer: B**

**Question No : 13**

Which of the following topics is the most important training for lean team members?

- A. Kanban
- B. Problem solving
- C. Single minute exchange of dies
- D. Standard work

**Answer: B**

**Question No : 14**

Objectives of implementing a work cell include which of the following outcomes?

- A. Increasing worker satisfaction
- B. Organizing resources by raw material type
- C. Implementing standard work
- D. Sharing common equipment

**Answer: A**

**Question No : 15**

Obtaining processing inspection and testing data is an example of which of the following quality-related costs?

- A. Appraisal
- B. Prevention
- C. Internal failure
- D. External failure

Answer: A

**Question No : 16**

The question below is based on the following chart of values relative to upper and lower control limits:



Which of the following types of variation is shown?

- A. Special
- B. Periodic
- C. Common
- D. Assignable

Answer: C

**Question No : 17**

The primary reason for using an empty conveyance container as a triggering signal is to:

- A. communicate the need for material.
- B. keep the original container filled with material.
- C. pull material downstream.
- D. push material downstream.

Answer: A