IC60C - Pre-Instructional Survey

Name: ____________________________________________  Date: _______________

1. Which of the following are true:
   a. MES implementation is an event, not a process
   b. Quantum leaps in MES implementations are common
   c. The philosophy for MES should be continual improvement
   d. MES was never meant to be a top management tool

2. Define three resource types typically managed in production operations
   a. _______________
   b. _______________
   c. _______________

3. A function is included in the control domain if (check all that apply):
   a. It is critical to maintaining regulatory compliance.
   b. It impacts the design and construction of a facility.
   c. It impacts the operational phase of the facilities life.
   d. It is critical to plant reliability.

4. Identify three levels within the manufacturing computer systems hierarchy.
   a. Operating system, machine interface, Internet.
   b. Planning, execution, device control.
   c. MRP II, planning, enterprise requirements.
   d. Inventory, movement, planning.

5. Identify four core functions within most MES systems.
   a. Planning, receiving, production, rework.
   b. Purchasing, sales, engineering, manufacturing
   c. Work order dispatching, production tracking, production data collection, product definition management.
   d. Forecasting, MRP, scheduling, data input.
6. Identify four support functions within many MES systems.
   a. Forecasting, material requirements, maintenance, marketing.
   b. Documentation management, quality assurance, maintenance management, configuration management
   c. Receiving, inspection, quality, logistics.
   d. PLC, computer, input station, data collection.

7. Name four expected benefits of an MES system.
   a. Reduced cycle times, reduced inventory, less paperwork, current data.
   b. Increased sales, better ROI, improved capacity, better networking.
   c. Improved morale, lower overhead, improved logistics, less product rejection.
   d. Less inventory, employee reduction, fewer plants, higher prices.

8. What are four components of an MES requirements specification?
   a. Programmable controller, computer, HMI, network.
   b. Logistics, inventory, programming, rework.
   c. As is condition, to be vision, hardware preferences, performance requirements.
   d. Number of users, screen layouts, data entry formats, paperwork issues.

9. What departments within the company should be consulted in designing an MES system?
   a. Sales, engineering, manufacturing.
   b. MIS, scheduling, purchasing, quality assurance.
   c. Maintenance, dispatching, enterprise planning supervisor.
   d. All of the above.

10. The boundaries between business logistics and manufacturing operations are (select all that apply):
    a. Lines of responsibility
    b. Technical lines of integration
    c. Manual and automated systems
    d. Sometimes based on business reasons
    e. ERP and control systems
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1. c and d

2. Personnel, Equipment, Materials

3. a, c, d

4. b. Planning, execution, device control.

5. c. Work order dispatching, production tracking, production data collection, product definition management.

6. b. Documentation management, quality assurance, maintenance management, configuration management

7. a. Reduced cycle times, reduced inventory, less paperwork, current data.

8. c. As is condition, to be vision, hardware preferences, performance requirements.

9. d. All of the above.

10. a, b, and d