

IC40 - Pre-Instructional Survey

Name: _____ Date: _____

1. A batch process, according to ISA/IEC standard
 - a. once established in a steady operating condition is not dependant on the length of time of the operation.
 - b. is a chemical processes which can not be run in a continuous manner.
 - c. is a process that leads to the production of finite quantities of materials.
 - d. must all take place in a single process unit.

2. The ISA S88.01 standard
 - a. specifies the one way to implement batch control.
 - b. emphasizes good practices for the design of batch plants.
 - c. restricts development in the area of batch
 - d. applies to all aspects of manufacturing

3. A recipe
 - a. tells the batch control system everything needed about how to make the product.
 - b. define the only way to make a specific product, independent of raw materials.
 - c. does not usually exist for each final product to be produced.
 - d. contains only some of the information that defines the production requirements of a product.

4. Some activities that make up batch control in process cell, according to the ISA/IEC standard, include
 - a. recipe management
 - b. batch scheduling
 - c. personnel and environmental protection
 - d. customer order processing

5. General recipes
 - a. are required for centralized control of product information.
 - b. are not a required element of a batch system.
 - c. are only needed for multiple country companies.
 - d. a and b
 - e. b and c
 - f. a and c

6. Site recipes
 - a. are required for site control of product information.
 - b. are only needed for sites with different processing capabilities in cells.
 - c. are not a required element of a batch system.
 - d. a and b
 - e. b and c
 - f. a and c

7. Master recipes
 - a. may be derived from a site recipe.
 - b. are not a required element of a batch system.
 - c. are a type of recipe which is not process cell specific.
 - d. a and b
 - e. b and c
 - f. a and c

8. Control recipe
 - a. is unique to a batch.
 - b. is not a required element of a batch system.
 - c. is derived from a master recipe.
 - d. a and b
 - e. b and c
 - f. a and c

9. Multiple operations may be active in a unit at the same time.
 - a. TRUE
 - b. FALSE

10. Multiple unit procedures may be active in a process cell at the same time.
 - a. TRUE
 - b. FALSE

11. Multiple batches may be running in a process cell at the same time.
 - a. TRUE
 - b. FALSE

12. Multiple batches may be running in a unit at the same time.
 - a. TRUE
 - b. FALSE

13. A recipe's procedure logic must be hard-coded into equipment.
 - a. TRUE
 - b. FALSE
14. Recipe procedures must be defined in terms of three levels.
 - a. TRUE
 - b. FALSE
15. Multiple unit procedures may be active in a single unit at the same time.
 - a. TRUE
 - b. FALSE
16. Equipment modules can contain a phase.
 - a. TRUE
 - b. FALSE
17. Control modules can contain a phase.
 - a. TRUE
 - b. FALSE
18. Equipment modules directly interface to the process.
 - a. TRUE
 - b. FALSE
19. Control modules directly interface to the process.
 - a. TRUE
 - b. FALSE
20. Process cell
 - a. boundaries are fixed.
 - b. can be uniquely identified by the equipment.
 - c. may contain one or more batches.
 - d. a and b
 - e. b and c
 - f. a and c

IC40 - Pre-Instructional Survey Answer Sheet

1. c
2. b
3. d
4. a
5. b
6. c
7. a
8. f
9. b
10. a
11. a
12. b
13. b
14. b
15. b
16. a
17. b
18. b
19. a
20. f