Unit 14 - Week 12: Micro process technology for process intensification

Assessment 12

Due on 2019-10-20, 23:59:57.

1. Hydrogen peroxide is required in several industrial processes. Name three processes where it is required.

2. A reactor is to be designed for a new process. What factors should be considered in the design of the reactor?

3. The production of ethylene glycol is associated with the production of which other substances?

4. A distillation column is being designed for a process. What are the key design parameters for a distillation column?

5. In batch distillation, the distillate is separated from the mixture by:

6. A reactor consists of several interconnected compartments. What are the advantages of having several compartments in a reactor?

7. The use of microprocess technology is becoming increasingly important in many industries. Give two examples of industries that benefit from microprocess technology.

8. The conversion of reactants to products in a chemical reaction is known as:

9. In a chemical reaction, the rate of reaction is affected by:

10. The use of microprocess technology can provide several advantages. Name two advantages of using microprocess technology.

11. The design of a reactor for a new process is critical. What are the key considerations in reactor design?

12. The analysis of reaction kinetics is important in understanding the behavior of chemical reactions. Name two methods commonly used for reaction kinetics analysis.

13. The selection of a reactor type depends on the specific requirements of the process. Name three types of reactors and their applications.

14. The optimization of a chemical process is crucial for maximizing efficiency. What are the key steps involved in process optimization?

15. The use of microprocess technology can lead to significant improvements in process efficiency. Name two examples of process improvements enabled by microprocess technology.

16. The design of a distillation column is a complex task. What are the key factors to consider in distillation column design?

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