



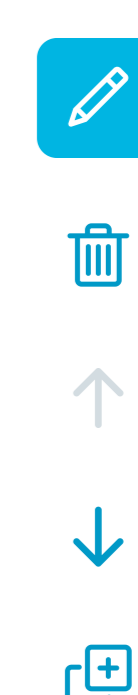
EK338 Separation Process Quiz

Save and Exit

 Align Quiz to Standard Enable Sharing
SOC-54328371

1. Following patterns are module flow patterns for membrane separation, EXCEPT

- A countercurrent flow
- B co-current flow
- C crossflow
- D cross-mix flow



2. What distillation is used to separate azeotropes and close boiling mixtures?

- A Extractive distillation
- B Salt distillation
- C Pressure swing distillation
- D Reactive distillation



3. The locus of compositions that cannot be crossed by the given distillation process, is called

- A Distillation boundary
- B Distillation gap
- C Distillation line
- D Distillation region



4. For azeotropic distillation, why entrainer is added in the process?

- A To increase the boiling point of the mixture
- B To decrease the boiling point of the mixture
- C To form a minimum boiling point of an azeotrope
- D To form two immiscible phases



5. Which of the factor affected the performance of microporous membrane?

- A Solubility difference
- B Rate of species diffusion through pores
- C Amount of feed to the membranes
- D Number of membrane used in the cascades



6. Removal of bacteria from cellular broths and in fat removal processes in the dairy industry falls in the category of

- A Ultrafiltration
- B Nanofiltration
- C Reverse osmosis
- D Microfiltration



7. The rate of water flow (the solvent flux) is

- A Directly proportional to the membrane thickness
- B Inversely proportional to the membrane thickness
- C Exponentially proportional to the membrane thickness
- D None of the above



8. The dialysis happening in our kidney are example of

- A Pressure-driven separation process
- B Thermal-driven separation process
- C Concentration-driven separation process
- D Charges-driven separation process



9. In the selection of light key and heavy key component, they must be

- A Adjacent in volatility
- B Similar in volatility
- C Different in volatility
- D None of the above



10. Based on this information,

Component distillate rate for LK (di) = 60
Component distillate rate for HK (dj) = 10
Bottom flow rate for LK (bi) = 30
Bottom flow rate for HK (bj) = 10
Mean relative volatility is 2

Determine the minimum number of stages required.

- A 1
- B 2
- C 3
- D 4



11. How is the resistance to solvent flow determined in membrane separation?

- A By measuring pore size distribution
- B By measuring amount of air passing
- C By measuring the volume of solvent passed after a certain time
- D By calculating water permeability



12. For an entrainer E, the components A and B must lie in :

- A Same distillation region
- B Different distillation region
- C On tie line
- D On convergence point



13. In the residue-curve map, the lowest boiling component is at:

- A Bottom left vertex
- B Bottom right vertex
- C At the centroid
- D At the top vertex



14. Which of the following correlation can determine the feed stage location?

- A Fenske correlation
- B Gilliland correlation
- C Kirkbride correlation
- D Underwood correlation



15. Which of the mixture will form a heterogeneous azeotrope?

- A Methanol-water
- B Butanol-water
- C Ethanol-water
- D Isopropyl alcohol-water



Add a Question

Multiple Choice

True / False

Short Answer