

- Q.3a)** Derive mass balance and energy balance equation for a rectification column [5]
b) With the help of diagram explain Rayleigh's equation. [5]
- OR**
- Q.3a)** Discuss about Boiling point diagram [5]
b) Derive an equation for flash distillation. [5]
- Q.4a)** Write notes on: i) Spray Dryer ii) Compartment Dryer [10]
- OR**
- Q.4a)** Explain constant rate and falling rate period for rate of drying curve.. [5]
b) With the help of diagram explain working of rotary dryer. [5]
- Q.5a)** Write a note on: Swenson -walker crystallizer. [5]
b) Discuss different factors considered for selection of solvent for gas absorption. [5]
- OR**
- Q.5a)** Discuss different methods used for obtaining saturation. [5]
b) Discuss Vacuum Crystallizer [5]
- Q.6a)** With the help of diagram explain working of Rotocell extractor. [5]
b) Discuss about Mixer settler. [5]
- OR**
- Q.6a)** Write a note on: i) Basket type extractor [5]
b) Discuss different factors which should be considered while selection of solvent for extraction. [5]

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