

Register No.:

553

April 2024

Time - Three hours  
(Maximum Marks: 100)

- [N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.  
2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

PART - A

1. What is Optimum reflux ratio?
2. State Dalton's Law.
3. Why Azeotropes are called boiling mixtures?
4. What is reboiler? Which type of reboiler is used in large scale industrial applications?
5. List out the Industrial application of Extraction.
6. What is the working principle of diffusion battery?
7. Write short notes on dumped tower pickings.
8. Write short notes on decolorizing carbons.
9. Do you accept "The crystal size distribution is a prime objective in design and operation of crystallizers" - Justify?
10. What is magma?

[Turn over.....

PART – B

11. (a) Explain about Flash distillation of binary mixtures with suitable diagram.

(Or)

- (b) Explain about material balances in plate columns with suitable diagram.

12. (a) Discuss about the steam distillation with neat sketch.

(Or)

- (b) Describe molecular distillation with neat diagram.

13. (a) Describe the Dorr thickener with suitable diagram.

(Or)

- (b) Describe about sieve tray tower extraction with suitable diagram.

14. (a) Explain the packed tower operation with neat diagram.

(Or)

- (b) Define adsorption. Explain the vapour phase adsorption system.

15. (a) Discuss about the working of draft tube baffle crystallizer with suitable diagram.

(Or)

- (b) Explain about Equilibria and Solubility curve with suitable diagram.

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