BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, MARCH 2025
2018, 2019, 2020, 2021 ADMISSIONS SUPPLEMENTARY
B. VOC SEMESTER VI - SKILL (FOOD PROCESSING TECHNOLOGY)
VFPT6S16B18 - Unit Operations in Food Industry

Time : 3 Hours   **Maximum Marks : 80**

Part A

I. Answer any Ten questions. Each question carries 2 marks   **(10x2=20)**

1. Define contact type heat exchangers.

2. Define countercurrent heat exchanger.

3. Write the expression for Fourier's law of heat conduction.

4. Cite the term food evaporation.

5. Which are the different types of evaporators in food industry?

6. Define raffinate.

7. Define orthorhombic structure.

8. What are the operating conditions of an extruder?

9. List the advantages of extrusion.

10. Define food extrusion.

11. Define pneumatic conveyor.

12. What is the equation to calculate capacity and power in bucket elevator?

Part B

II. Answer any Six questions. Each question carries 5 marks   **(6x5=30)**

13. Write short notes on double pipe heat exchanger.

14. Interpret on conduction heat transfer.

15. Write short notes on horizontal tube natural circulation evaporator.

16. Describe the principle of vertical tube evaporator.

17. Explain fractional distillation.

18. Explain in detail steam distillation.

19. Explain in detail the features of batch extractors.

20. Describe in detail supercritical fluid extraction.

21. Write short notes on filter aids and media used for filtration.

Part C

III. Answer any Two questions. Each question carries 15 marks   **(2x15=30)**

22. Describe in detail multiple effect evaporator with neat diagram.

23. Explain in detail steam distillation and fractional distillation with neat diagram.

24. Describe the equipments for solid-liquid extraction.

25. Describe with neat diagram the equipments for sedimentation.