



QP CODE: 25021670



25021670

Reg No :

Name :

B.VOC DEGREE REGULAR/REAPPEARANCE EXAMINATIONS, MARCH 2025

Sixth Semester

B.Voc Food Technology and Analysis

BOVG601 - FOOD ENGINEERING

2018 Admission Onwards

90FDB640

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. Define velocity with units.
2. Differentiate between moisture content on wet basis and dry basis.
3. What is static pressure in fluid flow measurement?
4. Explain on energy conservation by regeneration in plate heat exchanger.
5. Differentiate between Steady state and unsteady-state heat transfer.
6. Name the different centrifugation techniques used in food industry.
7. Define dialatant food with suitable example.
8. List down the different methods of size reduction.
9. State Bond's law with equation.
10. List down the emulsifiers suitable for foods.
11. Differentiate between slow freezing and quick freezing.
12. Define multiple effect evaporator.

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Explain any five derived units.
14. Explain centrifugal pump and positive displacement pump in liquid transport system.





15. Differentiate between laminar, transition and turbulent flow of fluids with reference to Reynolds Number.
16. Explain thermal properties of food.
17. Explain radiative heat transfer.
18. Explain any two pressure filters.
19. Explain the mixing of liquid foods.
20. What are the major criteria used for the selection of a refrigerant?
21. Describe the working of forced circulation evaporator with neat diagram.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Derive equation for velocity profile in liquid flowing under fully developed flow condition for laminar flow.
23. Classify heat exchanger and explain different heat exchangers with diagram.
24. Discuss briefly about extrusion technology.
25. Describe the process of dehydration and explain the mechanism of drying.

(2×15=30)

