



QP CODE: 24019614



Reg No :

Name :

**B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE
EXAMINATIONS, MAY 2024**

Second Semester

B.Sc Food Technology & Quality Assurance

Core Course - FQ2CRT01 - FOOD ENGINEERING

2017 ADMISSION ONWARDS

0A4B05D5

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. Distinguish between physical equilibrium and chemical equilibrium.
2. Discuss the advantages and disadvantages of plate heat exchangers.
3. Which law governs the conductive heat transfer?
4. What are Newtonian liquids?
5. Distinguish between laminar and turbulent flow.
6. Discuss the classification of clarifiers.
7. What is forced circulation evaporator?
8. Write any two advantages and disadvantages of freeze concentration.
9. Discuss water distillation.
10. What is freezer burn?
11. Add a note on different phases of drying curve.
12. Explain case hardening.

(10×2=20)

Part B

*Answer any **six** questions.*

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





13. Describe different engineering units with examples.
14. Explain phase diagram of water.
15. Write a note on thermal properties of food.
16. Write short notes on reciprocating pumps.
17. Explain Pitot tube.
18. Discuss on plate and frame membrane system and tubular membrane system.
19. Write notes on cake filtration techniques.
20. Explain freezing curve.
21. Explain plate freezers with a simple diagram.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Explain the role of insulation in reducing heat from process equipment with a suitable example.
23. Give a short note on different type of mixers.
24. Define sedimentation. Write a detailed note on sedimentation equipments and its applications.
25. Describe various types of driers used in food industry.

(2×15=30)

