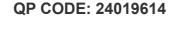
Turn Over



Reg No :

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 turbulant 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)