



# B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, MARCH 2024 Sixth Semester

B.Sc Food Science & Quality Control Model III

## CHOICE BASED CORE COURSE - FS6CBT28 - INTRODUCTION TO FOOD ENGINEERING

2017 Admission Onwards

131CE11B

Time: 3 Hours Max. Marks: 80

#### Part A

Answer any **ten** questions.

Each question carries **2** marks.

- 1. List down some examples of dimensions.
- 2. Define specific gravity.
- 3. Define temparature.
- 4. Define enthalpy.
- 5. Describe the uses of phase diagram of water.
- 6. Explain the equation of perfect gas law.
- 7. Write down an equation for work due to change in velocity.
- 8. Explain, pseudoplastic liquids.
- 9. Explain continuity equation.
- 10. Discuss on fuel utilization.
- 11. Explain three basic types of circuits.
- 12. Define Fourier's law.

 $(10 \times 2 = 20)$ 

#### Part B

Answer any six questions.

Each question carries 5 marks.



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- 13. Explain UNITS.
- 14. Explain state of system.
- 15. Explain laws of thermodynamics.
- 16. Discuss about pipeline systems and its importance in food processing.
- 17. Describe positive displacement pumps and its types.
- 18. Review the properties of fluids.
- 19. Describe properties of steam and steam table.
- 20. Explain thermal properties of foods.
- 21. Discuss the role of insulation in process equipment.

 $(6 \times 5 = 30)$ 

### Part C

Answer any two questions.

Each question carries 15 marks.

- 22. Explain conservation of mass in closed and open system.
- 23. Describe manjor and minor frictional energy losses.
- 24. Explain modes of heat transfer.
- 25. Discuss on various heat exchangers used in food industry.

 $(2 \times 15 = 30)$ 

