QP CODE: 25021043

Reg No	:	
Name	:	

# **B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025**

### Sixth Semester

B.Sc Food Technology & Quality Assurance

# CHOICE BASED CORE COURSE - FQ6CBT01 - EQUIPMENT AND MATERIAL DESIGN FOR FOOD PROCESSING PLANT

2017 Admission Onwards

72AAB377

Time: 3 Hours

Max. Marks: 80

#### Part A

## Answer any ten questions. Each question carries 2 marks.

- What are the necessary phases for realizing an industrial project? 1.
- Define fixed capital investment. 2.
- 3. Describe plant safety.
- 4. Write down the properties of carbon steel and low alloy steel.
- List out the properties of rubber. 5.
- 6. Describe installation of process equipment.
- Describe shredding equipment. 7.
- 8. What are roller mills?
- 9. Comment on bread moulders.
- 10. Hot extrusion is a HTST process.State.
- 11. List out the effect of blanching on food.
- 12. Describe the types of enrobers.

 $(10 \times 2 = 20)$ 

Part B

Answer any six questions. Each question carries 5 marks.



- 13. Describe manufacturing cost and profitability and break-even point.
- 14. Describe GMP for a food processing industry.
- 15. Write a note on fabrication of equipment.
- 16. Write down the importance of CIP system in a food processing industry.
- 17. Explain pressure homogenisers and ultrasonic homogenisers.
- 18. Write a short note on equipments used for mixing low or medium viscosity liquid foods.
- 19. Explain mixers used for high viscosity liquid foods and pastes.
- 20. What are extruders? Explain with the help of a suitable diagram.
- 21. Explain panning.

(6×5=30)

#### Part C

### Answer any **two** questions. Each question carries **15** marks.

- 22. Explain designing of an instrument.Describe the constructional and operating characteristics for selection of food processing equipment.
- 23. Define blending.Explain the types of equipments used for blending.
- 24. Explain blanching and its effect on food quality.
- 25. Discuss any two processing equipment commonly used in a food processing plant with suitable diagrams.

(2×15=30)