



QP CODE: 24001285

Reg No :

Name :

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

Sixth Semester

B.Sc. Food Technology and Quality Assurance

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

2017 Admission Onwards

DC1A8AC7

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. Add a note on material and energy balances.
2. Write on engineering cost indices.
3. How to calculate manufacturing cost?
4. List out the properties of rubber.
5. Describe installation of process equipment.
6. Mention the importance of ergonomics.
7. What are colloid mills?
8. Describe impeller agitator.
9. Describe the forming methods for biscuits.
10. Mention the advantages and limitations of conventional steam and hot water blanchers.
11. Hot extrusion is a HTST process. State.
12. What is dusting or breadding?

(10×2=20)



Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Write a note on new food plants.
14. Describe GMP for a food processing industry.
15. Write a note on ferrous metals.
16. Describe strength of construction and stresses involved in an equipment.
17. Explain size reduction of fibrous foods.
18. What are the equipments used for size reduction of dry foods?
19. Define mixers. Discuss the functioning of Anchor and gate agitator and sigma blade mixers.
20. How the use of processing equipments affects the quality of food? Explain.
21. Explain panning.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **15** marks.

22. Briefly explain hygienic design and selection of food processing equipment.
23. Define blending. Explain the types of equipments used for blending.
24. Describe extrusion process in detail with its application in food industry.
25. Write a detailed note on post processing operations in food industry.

(2×15=30)

