



Department of Food Technology
School of Interdisciplinary Sciences and Technology
Jamia Hamdard, New Delhi-110062
END SEM EXAMINATION (December, 2024. B.Tech. Vth Sem)

Roll No.

B.Tech.
5th Sem.
2024

Paper Title: Unit Operations in Food Processing; Paper Code: BFTD-504

Time allotted: 3hrs.

Max Marks: 60

*Important: At the END, mention how many questions from each section you have attempted.
Before answering make sure you have mentioned the Question No. & Section.*

Section-A (Attempt All) (2 Marks each)

1. What is material handling in food processing, and why is it essential?
2. Explain the principle of operation of a bucket conveyor.
3. What is the purpose of abrasive cleaning in food processing?
4. What is the significance of particle size analysis in milling operations?
5. What is the purpose of magnetic cleaning in food processing?

Section- B (Attempt any 5) (5 Marks Each)

6. Classify and explain the different material handling equipment used in food processing.
7. Discuss the working principle of screw conveyors and their advantages in food handling.
8. Define the term "grain storage" and compare traditional and modern storage structures.
9. What are the different types of size reduction procedures used in food processing? Discuss each briefly.
10. Explain the function of screening in food processing, and discuss different types of screens.
11. Discuss the importance of rheological properties in food processing and how they affect material handling.
12. Discuss the factors that affect the flow of bulk materials through orifices.

Section C (Attempt any 2) (12.5 Marks Each)

13. Describe the different types of conveyors used in material handling and explain their advantages.
14. Compare dry and wet cleaning methods in terms of efficiency and suitability for different food materials.
15. Discuss the three laws of size reduction and their applications in food processing.
16. Discuss the importance of the physical, mechanical, and thermal properties of agricultural materials in selecting equipment for food processing.

Q. No.	Mapping	Q. No.	Mapping
1	CO1;PO3,4	9	CO2;PO2,6
2	CO1;PO2,9	10	CO4;PO5,9
3	CO4;PO2,5	11	CO4;PO2,5
4	CO2;PO3,9	12	CO5;PO2,9
5	CO2;PO3,4	13	CO3;PO2,5
6	CO3;PO2,4	14	CO5;PO2,6
7	CO3;PO2,4	15	CO3;PO2,5
8	CO2;PO3,4	16	CO2;PO3,4