

PG DIPLOMA IN FOOD SCIENCE AND
TECHNOLOGY (PGDFT)

00278

Term-End Examination

June, 2011

MFT-003 : (FOOD PROCESSING AND
ENGINEERING)

Time : 2 hours

Maximum Marks : 70

Note : Attempt **any five** questions. All the questions carry **equal marks**.

1. Discuss the importance of thermal properties of foods and also describe different modes of heat transfer. 14
2. Explain the importance of mass and energy balance calculations in food processing operations. Also explain the concept of Reynolds number and its significance in food processing. 14
3. Why different types of equipments are required for handling and transportation of different types of raw food materials ? Discuss the equipments used in handling and transportation of foods in food industries. 14
4. Discuss factors affecting efficiency of expression and methods of expressing the liquid from solid-liquid food system. 14

6. Explain conceptual difference between sorting and grading. Why food materials are subjected to sorting and grading? Write a note on grading factor. 14
6. What is the importance of freezing rate on the quality of frozen products? Discuss direct and indirect contact system of freezing. 14
7. Why is food dehydrated? What is the basic differences between conventional drying and freeze drying? Why drying rate remains constant during constant rate period while it falls drastically in the falling rate period? 14
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