PG DIPLOMA IN FOOD SCIENCE AND TECHNOLOGY (PGDFT)

00084

Term-End Examination

June, 2012

MFT-003 : (FOOD PROCESSING AND ENGINEERING)

Time : 2 hours   *Maximum Marks : 70*

Note :   *Attempt any five questions. Each question carry equal marks.*

1. Define and write signifance of each of the   14
    physical/thermal properties of foods, given
    below :
    Sphericity, Thermal conductivity, Surface Area
    and Angle of Repose.

2. Describe construction and working of swept   14
    surface heat exchanger, shell and tube type heat
    exchanger and plate heat exchanger.

3. (a) Give mathematical representation of   8
        microbial inactivation rate at constant
        temperature.

    (b) Differentiate conventional canning and   6
        aspeplic canning.

4. (a) Differentiate between filteration and sieving. 6
    (b) What do you mean by homogenization of 4
         milk ?
    (c) Give your choice for mixing high viscosity 4
         liquids.

5. Give a detailed account of two non thermal 14
    advanced food processing techniques.

6. (a) Describe fumigation method and setup used 10
         to control insects and rodents in grain
         storage.
    (b) Illustrate the significance of cold chain. 4
         setup in India.

7. (a) Compare surface filteration, depth 6
         filteration and filter aid filteration.
    (b) Explain versatility of extrusion processing 8
         of foods.

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