

**P.G. DIPLOMA IN FOOD SCIENCE AND
TECHNOLOGY (PGDFT)**

Term-End Examination

December, 2015

**MFT-003 : FOOD PROCESSING AND
ENGINEERING**

Time : 3 hours

Maximum Marks : 70

Note : Attempt any five questions. Question no. 1 is compulsory. All questions carry equal marks.

1. Define the following (any seven) : 7x2=14
- (a) Specific heat
 - (b) Thermal conductivity
 - (c) Ohmic heating
 - (d) Screw pressing
 - (e) Conductive heat transfer
 - (f) Blast freezing
 - (g) Blanching
 - (h) Aspiration
 - (i) Wet milling
2. (a) Explain the construction and working of bucket elevator. 6
- (b) What is fumigation ? Explain the various equipments used for fumigation. 8

3. (a) Comment on thermal process calculation for canned foods. 4
 - (b) Define Reynold's number. What is its significance ? 3
 - (c) What is the difference between refrigeration and freezing ? Explain two methods of freezing along with specific examples. 3+4

 4. Discuss the various forces used in size reduction. Explain the various mode of size reduction. Briefly describe the processes of sorting and grading of food. 4+4+6

 5. (a) What is the difference between dry cleaning and wet cleaning ? Explain the various methods of dry cleaning. 3+4
 - (b) What is CA/MA storage ? Discuss the design of storage structure. 2+5

 6. (a) Discuss the hydraulic and screw pressing methods of the liquid from the solid liquid food system. 7
 - (b) Briefly describe the versatility of extrusion processing of foods. 7

 7. Write short notes on the following (any four) : 3.5x4=14
 - (a) High pressure processing
 - (b) Conveyors
 - (c) Microwave heating
 - (d) Plant sanitation
 - (e) Mixing equipments for foods
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