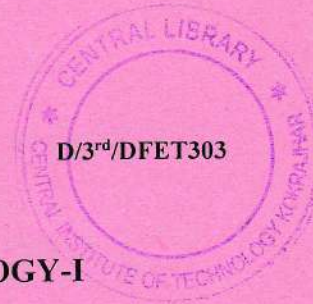


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2021

## FOOD PRODUCT TECHNOLOGY-I

Full Marks: 100

Time: Three hours

The figures in the margin indicate full marks for the questions.

Answer any five questions

1. a.) Match the following with correct connections: 5
- |                   |                 |
|-------------------|-----------------|
| 1.) Hydrogenation | a.) Pulses      |
| 2.) Parboiling    | b.) Canning     |
| 3.) Decortication | c.) Fat         |
| 4.) Drying        | d.) Rice        |
| 5.) Flat sour     | e.) Dehydration |
- 1 b.). Write True or False: 5
- Temperature effects the storage of fresh fruits and vegetables.
  - Hydrocooling uses air for cooling of foods.
  - Blanching is a mild heat treatment process.
  - Pasteurization inactivates enzymes to some extent.
  - Hydrogen swells is a type of can spoilage.
- 1(c). Fill in the blanks: 5
- Temperature used in drying step of malting is \_\_\_\_°C
  - Atomization of food particles is carried out in \_\_\_\_ drying.
  - During parboiling, \_\_\_\_ of starch takes place.
  - Wetting the storage room floor is one of the methods to maintain \_\_\_\_ during storage of fruits and vegetables.
  - Duration of carrying out Blanching is about \_\_\_\_.

1(d). Choose the correct answer:

5

- i.) Removal of the brown colored layer from paddy is known as: Milling/Polishing/Aspiration/Dehusking
- ii.) The paddy in CFTRI parboiling is soaked for: 40 minutes/1 hour /3- 3.5 hours /20 minutes
- iii.) Moisture lost during vacuum cooling of foods is about: 1% /2-3% /3-5% / 6-8%
- iv.) Caustic peeling uses: Calcium Hydroxide/Potassium Hydroxide /Sodium Hydroxide/Hydrogen Peroxide
- v.) The kind of drying where solid foods remain suspended in air is :  
Fluidized bed drier /Tunnel drier /Vacuum drier /Tray drier

2.

a.) Define Blanching and explain any 1 type.

5

b.) Mention the changes in the biochemical properties post parboiling of paddy.

5

c.) Write a small note on Food Preservation.

5

d.) Describe any 2 types of cooling of foods.

5

3.

a.) Explain how temperature influences the storage of fresh fruits and vegetables.

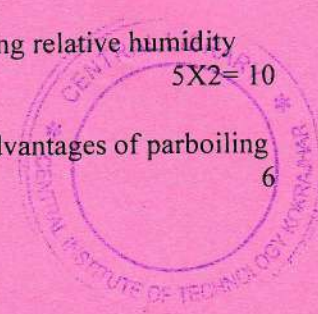
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b.) State any 5 points of maintaining relative humidity during storage of fresh commodities.

5X2= 10

c.) Write 2 advantages and 2 disadvantages of parboiling of paddy.

6





4.) a.) Describe any 3 types of spoilage that occurs in canned foods. 3X3=9

b.) Describe any 2 methods of processing of pulses. 3+3=6

c.) Write a short note on Hydrogenation and Plasticity of fats. 5

5 a.) What are the objectives of Pasteurization and state it's various types (mentioning the Time-Temperatures used). 5

b.) What are the various objectives of Drying foods? 4

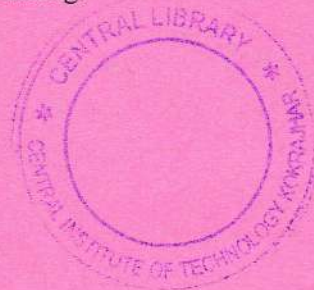
c.) Explain any 2 methods of peeling of foods. 2x3= 6

d.) Describe any 2 types of mechanical driers. 5

6 a.) Explain the steps of Pre-cleaning and dehusking in rice milling. 3+3=6

b.) Explain any 3 methods of cleaning of foods. 3X3= 9

c.) Describe the process of Malting. 5



7

a.) Explain the effects of thermal processing on the quality of fruits and vegetable products. 5

b.) Describe the steps in In-Pack Sterilization of Foods in Canning. 7

c.) Write any 4 products of utilization of waste management. 4 X 2= 8

