



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034**

**B.Sc. DEGREE EXAMINATION - FOOD CHEMISTRY & FOOD PROCESSING**

**THIRD SEMESTER - NOVEMBER 2013**

**FP 3875 - FOOD PROCESSING TECHNOLOGY**

Date : 14/11/2013

Dept. No.

Max. : 100 Marks

Time : 9:00 - 12:00

**PART - A**

**(20 marks)**

**Answer all the questions**

**Choose the best answer:**

**(5 x 1 = 5 marks)**

- Food product with coarsely ground wheat endosperm  
(a) Wheat bran (b) Refined flour (c) Semolina (d) MSG  
One of the following is not used in the fermentation of cocoa  
(a) acetobacter (b) lactobacillus (c) chlorella (d) yeast  
(3) Rotary Atomizer is present in  
(a) Solar drier (b) Microwave Oven (c) Tunnel Drier (d) Spray Drier  
Carmelization involves  
(a) bacteria (b) cooling process (c) addition of water (d) browning of sugar  
\_\_\_\_\_ is facultatively heterofermentative.  
(4) Pediococcus (b) Leuconostoc (c) Oenococcus (d) All the above

**State whether the following are true or false, if false give reason**

**(5 x 1 = 5 marks)**

- Addition of class I preservatives are restricted in food.  
Consumption of processed broad beans leads to hemolytic anemia  
(1) Osmotic dehydration helps in removal of water  
Sauerkraut is not a fermented food  
(0) Retort pouches have good moisture content

**Complete the following:**

**(5 x 1 = 5 marks)**

- (1) \_\_\_\_\_ is a cyanogenic glucoside present in sorghum  
(1) \_\_\_\_\_ is a mechanical process where milk is forced through a small passage at high velocity  
(1) \_\_\_\_\_ is the father of canning  
Kefir grains are live cultures of \_\_\_\_\_ and \_\_\_\_\_  
(1) \_\_\_\_\_ heating is in agreement with Joule's Law

**Answer the following, each within 50 words only**

**(5 x 1 = 5marks)**

- (1) What is meant by senescence?  
(2) List the enzymes used in tenderization of meat?  
(1) Mention the uses of hops.  
(1) What is the use of aluminum foil in retort pouches  
(1) Expand the following a) HEPA b) EU c) UHT d) URP

**PART - B**

(5×8 = 40 marks)

**Answer the following questions, each in about 500 words only.**

**Draw diagrams wherever necessary.**

21(a) Explain the process of malting cereals grains

**OR**

(b) What is Ohmic heating and enumerate its advantages?

22(a) Discuss the various hurdles used in food preservation.

**OR**

(b) Give short answers for the following:

- (i) Low acid foods with examples
- (ii) Appertization
- (iii) Convenience foods
- (iv) Atmospheric storage of foods

23(a) Write a note on methods used for concentration of liquids.

**OR**

(b) Explain the methods of dry heat sterilization

24(a) Give an account of enzymes used in fruit juice industry.

**OR**

(b) Write a note on effect (i) Radurization (ii) Advantages and disadvantages of freezing

25(a) Describe the different products of wheat with its role in Indian cooking.

**OR**

(b) Enumerate the different factors affecting sterilization

**PART - C**

**Answer any TWO of the following questions, each in about 1500 words:**

(2×20 = 40 marks)

**Draw diagrams wherever necessary.**

(26) Write elaborately on the Canning technology

(27) Write notes on:

- (i) Spoilage of food by microbes
- (ii) Microbes and different factors influencing their growth
- (iii) Moulding
- (iv) Freeze drying

(28) Give a detailed account on refining crude oil

(29) Describe the process involved in milk processing operations with an illustration.

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