

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



**M.Sc. DEGREE EXAMINATION – FOOD CHEMISTRY AND FOOD PROCESSING**

**THIRD SEMESTER – NOVEMBER 2018**

**FP 3807 – AGRO PRODUCTS AND PROCESSING**

Date: 29-10-2018

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

**Part A**

**Answer all the questions.**

10 x 2 = 20 marks

1. List any four operations involved in the handling of raw materials.
2. Mention the principle employed in a disc separator with a suitable example.
3. Define agglomeration.
4. Mention the types of yeasts employed in the manufacture of wine.
5. Mention any four toxic constituents in pulses.
6. List the possible products obtained in corn varieties through wet milling process.
7. List any two applications of spices as flavoring agents.
8. What contributes to the turgor of fruits and vegetables?
9. Represent the reactions involved in the mechanism of ripening of fruits.
10. What is blackstrap molasses in sugarcane processing?

**Part B**

**Answer any eight questions.**

8 x 5 = 40 marks

11. Explain the production protocol of wheat flour through chakki grinding.
12. What is “Threshing” of grains? Give a brief account on the types of threshing techniques adopted for pulses.
13. Write a brief note on the types of rancidity in fats and oils.
14. Elaborate on the antinutritional factors present in pulse varieties.
15. Explain the preparation protocol of the following products:
  - a) Coconut cream
  - b) Coconut milk powder
16. i) Describe the role of shortening in baked goods.  
ii) Major use of salad oils in salad dressings.
17. Write a note on Pseudo cereals and their nutritional importance.
18. What is the purpose of water in the bread making process?
19. Write a brief note on the skin removal techniques employed in vegetable/fruit processing.
20. Describe the canning procedure for storing fruits and vegetables with a suitable flow diagram.
21. Briefly explain the stages of sugar cookery and write a note on sugar coated products.

22. How are fruits ripened artificially? Give its health impact.

**PART C**

**Answer any four questions.**

4 x 10 =40 marks

23. Enumerate the unit operations employed in the manufacture of any product using cereal grain as the main ingredient. Design a suitable label for the packaging of the product chosen.
24. Explain the processing flowchart and harvesting operations of millets
25. Write a detailed note on oilseeds processing.
26. Discuss in detail any four colour pigments present in fruits and vegetables and the changes they undergo during processing.
27. Explain the process involved in the conversion of cacao beans to chocolate with a flowchart.
28. How is sugar manufactured from sugarcane and refined for consumption in the form of crystals?

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