

- Q.17 Discuss different types of separators.
- Q.18 Explain the working principle of Gerber centrifuge.
- Q.19 Discuss various types of distillation process.
- Q.20 Explain the process of crushing and grinding.
- Q.21 Differentiate between saturation and super saturation.
- Q.22 Mention criteria for selecting cleaning methods.

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)
- Q.23 Define mixing process with its objectives and various types of mixers used during processing of food.
 - Q.24 Discuss different types of homogenizers with their uses and applications in food processing.
 - Q.25 What do you mean by membrane separation? Explain various types of membrane filtration.

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Sem. 2nd/ Food Technology
Sub. : Unit Operations in Food Processing

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Which unit operation is used to kill microorganisms in food?
 - a) Filtration
 - b) Pasteurization
 - c) Evaporation
 - d) Crystallization
- Q.2 Which of the following is a common method for cleaning method for cleaning equipment in food processing?
 - a) Dry brushing
 - b) Igniting debris
 - c) Wet cleaning with detergents
 - d) Using compressed air only

- Q.3 What is crystallization in the context of food processing?
- A process of mix food ingredients
 - A method to cook food products
 - A technique to package food items
 - A process where a solid forms from a solution or melt
- Q.4 Which one is an application of membrane separation in food processing?
- Increasing food particle size
 - Concentration of fruit juices
 - Cooking food products
 - Adding flavours to foods.
- Q.5 Distillation is often used in food processing for which of the following application?
- Producing flavour extracts or essential oils
 - Making foods gels
 - Cooking food products
 - Packaging food items
- Q.6 Which of the following equipments is commonly used for size reduction of solid foods like spices or grains?
- Mixer
 - Extruder
 - Grinder or mill
 - Separator

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SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 CIP stands for _____.
- Q.8 Sorting and grading can help reduce ___ by removing defective or unsuitable products.
- Q.9 Over mixing can lead to undesirable changes in food _____.
- Q.10 Crushing equipment like rollers or presses are used to break down _____ materials.
- Q.11 In distillation vapors are then ___ to convert them back into liquid form.
- Q.12 Membrane separation uses a _____ barrier to separate components based on size or properties.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 Discuss various types of crystallizers.
- Q.14 Explain various types of filtrations.
- Q.15 Describe the principle and application of sieving in food processing.
- Q.16 Write about the extraction process with examples.

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