

- ### SECTION-D
- Note: Long answer questions. Attempt any two questions out of three Questions. (2x10=20)**
- Q.36 Discuss types of separation processes used in food processing.
- Q.37 Explain different types of extraction techniques.
- Q.38 Describe methods for the size reduction in liquid and fibrous foods.

**3rd Sem.**  
**Branch : Food Technology**  
**Sub: Unit Operation in Food Processing / Pr. Of Food Engg.**

**Time : 3 Hrs.** **M.M. : 100**

Q.1 Which unit operation involves the separation of food based on overall quality parameters

a) Sorting                      b) Grading  
c) Centrifugation          d) None of the above

Q.2 Cyclone separators separate\_\_\_\_\_.

a) Solid and liquid          b) Liquid and Liquid  
c) Liquid and gas          d) Solid and gas

Q.3 The rate of filtration is highest at

a) Initial stage                b) Final stage  
c) Intermediate stage      d) None of the above

Q.4 In membrane filtration, what type of molecule is typically removed?

a) Large molecules          b) Water  
c) Sugars                      d) Vitamins

Q.5 Which method is used to remove dissolved gases from liquids in food processing?

a) Spray drying                b) Deaeration  
c) Freezing                     d) Blanching

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- Q.6 What is the main purpose of size reduction in food processing?
- To increase surface area
  - To enhance flavour
  - To decrease weight
  - To improve
- Q.7 Which type of mill is used for ultrafine grinding in food processing?
- Ball mill
  - Pin mill
  - Roller mill
  - Hammer mill
- Q.8 Which of the following factors affects the efficiency of mixing?
- Viscosity of materials
  - Temperature of the mixture
  - Size of mixing equipment
  - All of the above
- Q.9 What is the function of an agitator in food mixing?
- Transfer heat
  - Reduce particle size
  - Create motion in the mixture
  - Remove moisture
- Q.10 What type of filter is used to clarify beverages?
- Pressure filter
  - Gravity filter
  - Membrane filter
  - Drum filter

## SECTION-B

**Note: Objective type questions. All questions are compulsory. (10x1=10)**

- Q.11 Crystallization occurs during the concentration process. (True/False)
- Q.12 Defined reverse osmosis \_\_\_\_.
- Q.13 Screw press issued to extract liquids from solids. (True/False)
- Q.14 Define the leaching process.
- Q.15 Mills used for size reduction of liquid food\_\_.
- Q.16 Size reduction reduces the nutritive value of good. (True/False)
- Q.17 Define mixing index.
- Q.18 Sorting separates food based on a particular quality parameter. (True/False)
- Q.19 What is filter cake.
- Q.20 Define homogenization.

## SECTION-C

**Note: Short answer type Questions. Attempt any twelve questions out of fifteen Questions. (12x5=60)**

- Q.21 Write down the function of cleaning in food industries.
- Q.22 Explain the working principle of magnetic separators.
- Q.23 What are the objectives and benefits of grading in fruit processing.
- Q.24 Explain any two types of sorting instruments in brief.