

- Q.24 Explain flash distillation.
 Q.25 Write about the Extraction.
 Q.26 Write about Kick's law of size reduction.
 Q.27 Discuss any three types of sieves.
 Q.28 Explain unit operations that occur during ice formation.
 Q.29 Differentiate saturation and supersaturation.
 Q.30 Discuss cyclone separators.
 Q.31 Write about distillation.
 Q.32 Explain the process of homogenization.
 Q.33 Describe the ant two types of cutting machines.
 Q.34 Explain the process of "crushing" and "grinding" as unit operations in size reduction.
 Q.35 Explain the principle of sedimentation. How does particles size and density influence the efficiency of sedimentation processes?

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Discuss types of filtration process used in food processing.
 Q.37 Explain different types of extraction techniques.
 Q.38 Explain various types of crystallizers.

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3rd Sem / Food Technology
Subject:- Unit Operation in Food Processing / Pr.
Of Food Engg.

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Which unit operation involves the separation of a liquid mixture into its individual components based on their boiling points?
 a) Filtration b) Distillation
 c) Evaporation d) Absorption
 Q.2 Which is not a cleaning method
 a) Abrasion b) Aspiration
 c) Floatation d) Kneading
 Q.3 Which unit operation is used to remove solid impurities from a liquid by causing the solid particles to settle at the bottom?
 a) Filtration b) Sedimentation
 c) Extraction d) Evaporation
 Q.4 Which factors affect the screening method.
 a) Surface area of the particles
 b) Specific gravity of the particles
 c) Magnetic properties of the particles
 d) Size of particles

- Q.5 Which one is a type of filter aid material.
 a) Salt b) Sugar
 c) Activated charcoal d) None of these
- Q.6 Which unit operation involves the reduction of the size of solid particles?
 a) filtration b) Sedimentation
 c) Grinding d) Crystallization
- Q.7 Which unit operation occurs while formation of ice crystals
 a) Crystallization b) Melting
 c) Precipitation d) Distillation
- Q.8 Which unit operation involves the heating of a liquid mixture to vaporize the volatile component and then condensing it back to a liquid?
 a) Filtration b) Crystallization
 c) Evaporation d) Distillation
- Q.9 Which process can be used for separating oil from oilseeds
 a) Extraction b) Filtration
 c) Distillation d) Crystallization
- Q.10 In which unit operation does a solid settle out of a suspension due to the force of gravity?
 a) Filtration b) Sedimentation
 c) Evaporation d) Crystallization

SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Nucleation in the first step of ice formation (True/False)
- Q.12 Defined precipitation.
- Q.13 Leaching occurs during the cooking of vegetables (True/False)
- Q.14 Supersaturation is the excess of solutes in the solution (True/False)
- Q.15 Unit operations used for reducing fat globules in milk _____
- Q.16 Unit operation separates solid particles from a liquid by gravity through a porous medium _____
- Q.17 Centrifugation used for _____
- Q.18 Mixing is a reversible process (True/False)
- Q.19 BIS stands for _____
- Q.20 Screw press used for _____

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Write down the functions of cleaning in food industries.
- Q.22 Explain specific gravity separators.
- Q.23 What are the objectives of sorting for fruit processing.