

- Q.25 Write the aims and advantages of sorting in food industry?
- Q.26 How can we calculate crushing efficiency?
- Q.27 What are the aims of filtration?
- Q.28 Give the importance of blending and mixing.
- Q.29 What is mixing index?
- Q.30 Write a note on distillation?
- Q.31 Describe theory of Comminution?
- Q.32 What do you understand by homogenization?
- Q.33 How size reduction affects the nutritive value and sensory characteristics of food product?
- Q.34 Write a short note on grading?
- Q.35 Write a note on working principle of rotary vacuum filter?

SECTION-D

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

- Q.36 Describe
- Depth filtration
 - Ribbon mixer
- Q.37 Explain the size reduction equipments of fibrous, dry and liquid foods?
- Q.38 Define grinding? In list various methods of grinding and explain any two with neat and clean diagram.

No. of Printed Pages : 4 181134/121134/031134
Roll No.

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 The basic operations done in the food process engineering are called as _____
- unit operations
 - processing
 - process management
 - unit process
- Q.2 Which of the following are the unit operations?
- Distillation, evaporation, centrifugation
 - Distillation, membrane separation, sampling
 - Membrane separation, centrifugation, sampling
 - Evaporation, centrifugation, sampling
- Q.3 Preliminary unit operation in any food industry includes _____
- cleaning, sorting
 - cleaning, drying
 - grading, drying
 - sorting, drying
- Q.4 What is meant by crystallization?
- Concentration of atoms into a highly structured form
 - Solidification of atoms into a highly structured form

- c) Solidification of solution
 d) Concentration of solution
Q.5 Which of the following is crystallization?
 a) Solid-solid separation
 b) Solid-liquid separation
 c) Solid-gas separation
 d) Liquid-gas separation
Q.6 The pore size for the removal of viruses is _____
 a) 20 nm b) 30 nm
 c) 25 nm d) 35 nm
Q.7 Which of the following forces acts in ball mill?
 a) Gravitational force
 b) Centrifugal force
 c) Gravitational and centrifugal forces
 d) Does not depend on any force
Q.8 Which of the following machine is not used for fine grinding?
 a) Jaw crushers b) Ball mill
 c) Hammer mill d) Attrition mill
Q.9 Which of the following is a size reduction unit operation in liquids?
 a) Milling b) Mixing
 c) Grinding d) Homogenization
Q.10 What do you mean by filter cake?
 a) The cake which is to be filtered
 b) A porous membrane used to retain the solids
 c) The solids which are present on the filter
 d) A suspension to be filtered

SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Enlist any two types of distillation process.
 Q.12 Size reduction process is also termed as comminution (True/False)
 Q.13 Give name of any two mixing equipments?
 Q.14 Define crushing?
 Q.15 Define Sedimentation?
 Q.16 Define Crystallization?
 Q.17 Propeller, Helical and turbine are the type of size reduction equipments (True/False)
 Q.18 Assessment of the overall quality of food using a number of attributes is called _____ (Sorting / grading).
 Q.19 Enlist of two types of crushers ?
 Q.20 Define Sieving?

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Write the aims and advantages of cleaning in food industry?
 Q.22 Write a note on hammer mill?
 Q.23 Draw a diagram of Gyratory crusher and give its working principle?
 Q.24 Define sieving and write down the types of screens?