

- Q.26 Describe the principles and importance of drying of cereal and pulses.
- Q.27 Describe the various types of insects that affect the stored grains.
- Q.28 How the temperature and moisture will changes during the storage of cereals?
- Q.29 Describe the controlled and modified atmosphere storage of cereals?
- Q.30 Differentiate between Deep and Shallow bins.
- Q.31 Write different storage conditions for fruits and vegetables.
- Q.32 Define and explain the concept of Equilibrium Moisture Content (EMC).
- Q.33 Explain the working principle of Fluidized bed dryer.
- Q.34 Describe the Brown-Duvel fractional distillation method of moisture content determination.
- Q.35 Differentiate between the Bag and Bulk storage of cereals and pulses.

#### **SECTION-D**

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

- Q.36 Define Packaging and explain the different types of packaging used for fruits and vegetables in detail.
- Q.37 Explain in detail cool-chain for handling, storage and marketing of fresh fruits and vegetables.
- Q.38 Explain the working of different material handling equipment in details.

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**4th Sem / Agri**

**Subject:- Post Harvest Technology**

Time : 3Hrs.

M.M. : 100

#### **SECTION-A**

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

- Q.1 Which of the following method is not involved in post-harvest technology?  
 a) Chilling                          b) Drying  
 c) Boiling                            d) Filtering
- Q.2 During controlled atmospheric storage composition of which of the following set of gasses is controlled.  
 a)  $O_2+N_2$                         b)  $CO_2+N_2$   
 c)  $CO_2+O_2$                         d)  $C_2H_4+N_2$
- Q.3 Moisture content attained by grain with respect to a set of atmospheric temperature and relative humidity is called  
 a) Moisture content  
 b) Equilibrium moisture content  
 c) Optimum moisture content  
 d) None of above
- Q.4 CA Stands or \_\_\_\_\_  
 a) Controlled Atmosphere  
 b) Centrally Air conditioner  
 c) Completely Air conditioner  
 d) None of these

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- Q.5 Reduction of food grains into various end products is called  
 a) Milling                      b) Grading  
 c) Cleaning                    d) Storage
- Q.6 Which of the following is not artificial drying method?  
 a) Convective drying      b) Sun drying  
 c) Contact drying            d) Radiation drying
- Q.7 Factor affecting the drying process is  
 a) Air velocity                b) Air temperature  
 c) Air exposure time        d) All of these
- Q.8 Angle of repose is associated to which property  
 a) Frictional                 b) Physical  
 c) Mechanical                d) None of these
- Q.9 Transit of agricultural products from producer to processor and from processor to consumer is known as  
 a) Milling                      b) Packaging  
 c) Storage                     d) None of these
- Q.10 Bukhari is a \_\_\_\_\_ storage structure  
 a) Traditional                b) Modern  
 c) Permanent                  d) Improved

## SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Thermal conductivity is a \_\_\_\_\_ property of agricultural material
- Q.12 Define Mechanical drying
- Q.13 In Flat bed dryer the depth of drying layer of grain is \_\_\_\_\_ as compared to deep bed dryer.
- Q.14 Define Expelling.
- Q.15 The process of excess moisture removal is called \_\_\_\_\_
- Q.16 Define Blending.
- Q.17 Equipment used to convey materials is called \_\_\_\_\_
- Q.18 Define Terminal Velocity.
- Q.19 What is pre-cleaning?
- Q.20 Define Elasticity of grains.

## SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 What do you mean by post-harvest technology and its scope in India?
- Q.22 How will you represent the moisture content of grains?
- Q.23 Describe the Aero and Hydrodynamic properties of agricultural materials.
- Q.24 Write a note on continuous Flow Drying system.
- Q.25 Explain the Thermal Properties of agricultural materials