



KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Agrl. Engg.) 2022 Admission
VIII Semester Final Examination-June-2026

Elfa.4203

Food Packaging Technology 3 (2+1)

Marks: 50

Time 2 hours

I Fill in the blanks

(5x1=5 marks)

1. The package containing number of secondary packages are called.....
2. are common oxygen scavengers
3. is a common plastic used for water bottles and soft drink packaging
4. is the process used to smoothen the surface of paper and give it glory finish
5. EVOH stands for

II True or False

(5x1=5 marks)

1. Oil resistance of HDPE is better than LDPE
2. Thermo-plastic can melt and reshaped repeatedly
3. In active packaging, the atmosphere inside the package remains constant
4. The process of removal of stress from glass is smelting
5. Canning is also known as aseptic packaging

III Write short notes on any five of the following

(5x2=10 marks)

1. RFID and MDI
2. Differentiate DRD & DWI cans
3. Vacuum packaging of meat
4. Double seaming process in can making
5. Differentiate gas indicator and time temperature indicators
6. Paper making machine
7. Addition polymerization

IV Answer any five of the following questions

(5x4=20 marks)

1. Classify the major types of active packaging systems based on their mode of action and explain any two
2. Discuss the glass manufacturing process with neat diagram
3. Write about the beating and refining process in detail
4. List out the methods for measuring permeability of gases and explain any one
5. Briefly explain the packaging material sterilization methods of aseptic packaging
6. Explain the role of plastics in food packaging
7. Briefly discuss the environmental factors affecting shelf life of food material

V Answer any one question

(1x10=10 marks)

1. Explain in detail the various types of bio-based packaging materials and discuss their barrier properties with suitable examples.
2. Discuss in detail the various testing methods used to evaluate the physical, mechanical, and barrier properties of paper-based packaging materials.