

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE  
SEMESTER END THEORY EXAMINATION

B.Tech. (Food Technology)

Semester : 1 (New)	Term : First	Academic Year : 2024-25
Course No. : FT-111	Title : Fundamentals of Food Processing	
Credits : 3(2+1)	Total Marks : 80	
Day & Date : Saturday, 08.02.2025	Time : 10:00 to 13:00 hrs.	

- Note : 1. Solve ANY EIGHT questions from SECTION 'A'.  
2. All questions from SECTION 'B' are compulsory.  
3. All questions carry equal marks.  
4. Draw neat diagram wherever necessary.

SECTION 'A'

- Q.1 Describe in detail the causes of food spoilage.  
Q.2 Narrate the principles and methods of food preservation.  
Q.3 Classify food preservatives and explain in detail food preservation by the use of chemicals.  
Q.4 Describe in detail the methods of food preservation by low temperature.  
Q.5 Describe in detail different steps involved in canning of vegetables.  
Q.6 What do you mean by Cold sterilization of foods? Give its merits and demerits.  
Q.7 State in brief about:  
a) Methods of food concentration                      b) Food preservation by fermentation  
Q.8 Discuss in detail the cold plasma processing with its applications in Food Processing.  
Q.9 Elaborate the principle and applications of high pressure processing in food preservation.  
Q.10 State the methods for determination of a product's shelf life.

SECTION 'B'

- Q.11 Define the following terms:  
1) Canning      2) Intermediate Moisture Foods      3) Blanching      4) Freeze drying  
5) Antioxidant      6) Food preservation      7) Dehydro-freezing      8) Shelf life
- Q.12 Fill in the blanks:  
1) 'Sauerkraut' is a pickled \_\_\_\_\_.  
2) Phenomenon of spontaneous exudation of fluid from a gel, is called as \_\_\_\_\_.  
3) In 1810, \_\_\_\_\_ obtained the first British Patent on canning of foods in tin containers.  
4) A novel, non-thermal food processing method that uses energetic, reactive gases to inactivate contaminating microbes on food is \_\_\_\_\_.  
5) Radiation is also called as \_\_\_\_\_.  
6) The cans must quickly cool to about \_\_\_\_\_ °C temperature before storage to avoid stack burning.  
7) Freezing prevents the growth of microorganisms due to \_\_\_\_\_ water activity.  
8) The toxicity of Sulphur dioxide as a preservative \_\_\_\_\_ at high temperature.

