





**B.Voc. DEGREE EXAMINATION, APRIL 2019  
FOOD PROCESSING AND QUALITY CONTROL  
SIXTH SEMESTER**

**COURSE : MAJOR CORE**  
**PAPER : EMERGING TRENDS IN FOOD PROCESSING AND TECHNOLOGY**  
**TIME : 3 HOURS** **MAX.MARKS: 100**

**SECTION – A**

**Answer all the questions:**

**I. Choose the correct answer: (20 x 1=20)**

1. Usage of mild additives in washing water for disinfection is used for prevention of  
a) Cloning    b) Enzyme deactivation    c) Decolourization    d) Browning
2. Water activity is calculated to know \_\_\_\_\_  
a) relative humidity    b) microorganism growth    c) oxidation    d) drying capacity
3. In Map the composition of CO<sub>2</sub> is \_\_\_\_\_  
a) 2-5%    b) 0-5%    c) 0-10%    d) 10 – 20 %
4. Pick the logo that denotes food irradiation  
a)     b)     c)     d) 
5. Anti-freeze proteins are a class of  
a) Carbohydrates    b) Fats    c) Polypeptides    d) Alcohols

**II. Fill in the blanks:**

6. Minimal processing is the technique that involves \_\_\_\_\_ treatment.
7. Freshly cut fruits and vegetables are stored in the temperature range \_\_\_\_\_.
8. MAP controls biochemical and enzymatic activity by \_\_\_\_\_.
9. A benefit of High Pressure Freezing is \_\_\_\_\_.
10. The role of Plant AFP's is to \_\_\_\_\_.

**III. State whether True or False:**

11. Bacteria are able to withstand high voltage gradient.
12. Ohmic heating hastens ripening.
13. Boiling point of water increases with increase of pressure.
14. Irradiation of meat and poultry can cause elimination of Salmonella.
15. Thermal hysteresis is measured with a Nephelometer.

**IV Answer in a line or two:**

16. PEF
17. MAP
18. HPP
19. Benzoic Acid
20. Vacuum cooling

**SECTION – B****Answer any four questions:****(4 x 10 = 40)**

21. Explain minimal processing with an example and give its advantages and disadvantages.
22. What is pulsed electric field? What are its applications in the food industry?
23. Discuss the microbiological aspects in high pressure processing.
24. Enumerate the advantages and limitations of Ohmic heating.
25. What is Ultrasonic assistance of food freezing?
26. Explain the effect of microwaves in food processing and discuss the advantages and disadvantages.

**SECTION – C****Answer any two questions:****(2x 20 = 40)**

27. Explain the process of vacuum cooling of foods. What are its advantages and limitations?
28. Explain the principle, process, equipment and applications of Ohmic heating.
29. Is food irradiation acceptable? Justify your answer. Explain the process in detail.
30. How are anti-freeze proteins obtained? What is the need to use antifreeze proteins? Explain its process and applications in the food industry.