

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2016-17& thereafter)

SUBJECT CODE: 16VF/VM/PT66

B.Voc. DEGREE EXAMINATION, APRIL, 2021
FOOD PROCESSING AND QUALITY CONTROL.

COURSE : MAJOR CORE
PAPER : EMERGING TRENDS IN FOOD PROCESSING AND TECHNOLOGY
TIME : 90 MINUTES **MAX. MARKS: 50 MARKS**

SECTION – A

(10 X 1= 10)

ANSWER ALL QUESTIONS

I Choose the Correct answer:

1. The development of microbial contaminants in minimally processed products can be controlled by
a. Water activity b. Microbial activity c. Physical activity d. pH.
2. The charge separation across the membrane leads to a normal potential difference of around
a. 100mV b. 50mV c. 10mV d. 5mV
3. High pressure treated foodstuff have been marketed in japan since
a. 1998 b. 1990 c. 1800 d. 1890

II State whether True or False:

4. Joule heating was first experimented by James Prescott Joule in the year 1841.
5. Cavitation results in occurrence of macro streaming.

III Fill in the blanks:

6. Ultrasound assisted freezing is _____ process.
7. High pressure freezing device became commercially available in _____.
8. Anti-freeze proteins are also called as _____.

IV Answer in a sentence:

9. Thermal hysteresis
10. Vacuum cooling

SECTION – B

(10x2=20)

Answer any TWO questions:

11. Write in detail the minimal processing of fruits and vegetables and its packaging using MAP.
12. Explain how the inactivation of microorganisms and enzymes is possible with the application of heat and ultrasound.
13. Explain in detail high pressure processing in food industry. What is the microbiological aspect of high pressure processing?
14. Explain in detail the process of food irradiation and give its advantages, disadvantages and applications.

SECTION – C

(20 x 1=20)

Answer any ONE question:

15. How does a food product get treated using Ohmic Heating? Write the advantages and limitations of Ohmic heating.
16. How are anti-freeze proteins obtained? What is the need to use antifreeze proteins? Explain its process and applications in the food industry.
