

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, SEPTEMBER 2020
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. Minimally processing is a technique to provide _____.
a. Cooked food b. Freezing food c. Ready to cook/eat d. None of the above.
2. The charge separation across the membrane leads to a normal potential difference of around -----
a) 100mV b) 50mV c) 10mV d) 5mV.
3. Food exposed briefly to a radiant energy source such as _____
a) gamma rays b) electron beam c) X-rays d) All the above

II State whether True or False:

4. Optimal wavelength of light wave for maximum germicidal effect is 2600 Å.
5. Ultrasound assisted freezing is used during Evaporation of fluid food.

III Fill in the blanks:

6. Cavitation results in occurrence of _____.
7. Pressure applied in high pressure assisted freezing is _____.
8. Anti freeze proteins are also called as _____.

IV Answer in a sentence:

9. Thermal hysteresis.
10. Joule heating

SECTION – B

(10x2=20)

Answer any TWO questions:

11. Explain the process of MAP and its application in fruits and vegetables industry and give the importance of using Oxygen and Carbon-dioxide.
12. Is food irradiation acceptable? State reasons for your answer. Explain the process in detail and give its advantages and disadvantages.
13. Explain how the inactivation of microorganisms and enzymes is possible with the application of heat and ultrasound.
14. How are anti-freeze proteins obtained? What is the need to use antifreeze proteins? Explain its process and applications in the food industry.

SECTION – C

(20 x 1=20)

Answer any ONE question:

15. What is pulsed electric field? What are its applications in the food industry? Give a diagram for the equipment and process flow. What are its advantages and disadvantages?
16. Explain the process of vacuum cooling of foods. What are its advantages and limitations?