

TM2111020TR

Reg. No : .....

Name : .....

**M. Voc DEGREE (C.S.S.) EXAMINATION, NOVEMBER 2021**  
**[ 2021 Admissions Regular and 2020 Admissions Improvement & Supplementary ]**  
**SEMESTER I - SKILL ( FOOD PROCESSING TECHNOLOGY )**  
**VFPT1S02TM20 - NOVEL TRENDS IN FOOD PROCESSING**

**Time : 3 Hours**

**Maximum Weight : 30**

**Part A**

**I. Answer any Eight questions. Each question carries 1 weight** **(8x1=8)**

1. Define the process 'Steeping' and give an example of its use
2. Identify the key ingredient in Pickling and mention its role
3. What is meant by 'impeller' of a mixing equipment? Identify the impeller used for mixing low viscous liquids
4. Distinguish between the terms 'Grading' and 'Sorting' of agricultural produce
5. Develop a flow chart for the canning of tomatoes
6. Define 'Vacreation' and mention its purpose
7. Identify the key principles that High Pressure Processing depends on
8. List the effects of low temperature processing on biological active tissues of fruits and vegetables
9. List the principles that hurdle technology is based on
10. List examples of hurdles that are used to preserve foods

**Part B**

**II. Answer any Six questions. Each question carries 2 weight** **(6x2=12)**

11. Classify preservation techniques on the basis of mode of their action
12. Describe the concept of Food Perishability
13. Write a note on the various types of grinding equipment that are used for size reduction process
14. Mention on the requirements that have to be looked into when incorporating a homogeniser in the HTST/UHT pasteurization system
15. Explain briefly on the process of Sterilization with an emphasis on the different types present
16. Draw a schematic diagram on the equipment utilised for freeze concentration and elaborate on the various steps involved for this process
17. With the help of a schematic diagram, explain on the various components used in an High Pressure Processing equipment
18. Give a note on history of Food Irradiation

**Part C**

**III. Answer any Two questions. Each question carries 5 weight** **(2x5=10)**

19. Elaborate on the mode of preservative action by bacteriocins
20. Outline the theories that govern the process of Homogenization. Mention a note on types of homogenizer with diagrams

21. Deduce the working of a Drum drier. Add a note on the different types that are available.
22. Recall the non thermal technology of food processing that works with the utilisation of an electric field and explain its mechanism