

MASTER'S DEGREE (C.S.S) EXAMINATION, NOVEMBER 2024

2024 ADMISSIONS REGULAR

M.VOC FPT SEMESTER I - SKILL

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. State the principles of food preservation.
3. Identify the key processes that govern Mixing
4. What is meant by 'impeller' of a mixing equipment? Identify the impellor used for mixing low viscous liquids
5. Define 'Vacreation' and mention its purpose
6. List down the objectives of blanching.
7. List down the benefits of food irradiation technology.
8. List the effects of low temperature processing on biological active tissues of fruits and vegetables
9. List down a few applications of PEF and irradiation techniques in food industry.
10. Hurdle technology has an essential role in food processing. Justify with suitable example.

Part B

II. Answer any Six questions. Each question carries 2 weight

(6x2=12)

11. Elaborate briefly on the principle groups of micro organisms used for food fermentation
12. Briefly explain the fermented foods and microorganisms associated with it.
13. Size reduction and mixing can be achieved by homogenization technique. Justify.
14. Explain the effects of drying on food products.
15. Illustrate the working of cabinet drier and tunnel drier.
16. Explain the role of CAS on preservation of fruits, vegetables and meat.
17. Explain the various changes taking place on a freeze dried and HPP methods.
18. Explain on how hurdle technology can be applied in food industries.

Part C

III. Answer any Two questions. Each question carries 5 weight

(2x5=10)

19. Traditional preservation methods have been modified for the betterment of food industries. Justify.
20. Explain in brief on the following membrane filtration techniques (a) Electrodialysis (b) Ultrafiltration (c) Reverse Osmosis (d) Nanofiltration
21. Deduce the working of a Spray drier. Add a note on the categorisation done for different types of spray driers
22. Recall the non thermal technology of food processing that works with the utilisation of an electric field and explain its mechanism