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**DHANALAKSHMI SRINIVASAN COLLEGE  
OF ARTS & SCIENCE FOR WOMEN  
(AUTONOMOUS)**

(For Candidates admitted from 2019-2020 onwards)



**UG DEGREE EXAMINATIONS APRIL - 2021**

**B.Sc., – FOOD TECHNOLOGY AND QUALITY CONTROL**

**FOOD PROCESSING AND ENGINEERING**

**Time: 3 Hrs**

**Max.Marks: 75**

**PART - A**

**CHOOSE THE CORRECT ANSWER**

**(10X1=10)**

1. .... is used as a refrigerant in domestic and commercial refrigeration.  
a) Chlorofluorocarbon      b) Hydro fluorocarbon      c) Ammonia      d) CO<sub>2</sub>
2. .... is the ideal refrigerator temperature.  
a) 2°Celsius      b) 30°Celsius      c) 40°Celsius      d) 50°Celsius
3. Immersing food directly with liquid nitrogen or carbon-di-oxide is ..... freezing.  
a) Cryogenic      b) Deep      c) Fluid      d) Blast
4. The ideal method for drying perishable foods is ..... drying.  
a) Fluidized bed      b) Vacuum      c) Spray      d) Freeze
5. Measure of absorbed energy per mass is .....  
a) Velocity      b) Roentgen      c) Rad      d) Rem
6. .... gas is used for packing sensitive food material.  
a) Helium      b) Hydrogen      c) Nitrogen      d) Oxygen
7. .... is the most commonly used equipment in a small scale food industry.  
a) Pneumatic conveyor      b) bucket elevator      c) belt conveyor      d) Screw conveyor
8. .... plays a major role from the production of raw materials to supermarket.  
a) Material handling      b) Preservation      c) Packaging      d) Labeling
9. The use of high temperature to kill microorganisms and deactivate enzymes is done through ..... processing.  
a) Dehydration      b) Salting      c) Thermal      d) Vacuum
10. The separation and purification of volatile food products from aqueous blends is called .....  
a) Sedimentation      b) Filtration      c) Distillation      d) Centrifugation.

## PART – B

### ANSWER ALL THE QUESTIONS

(5X7=35)

11. a) Define freezing. Discuss the various requisites of refrigerated storage.

(OR)

b) Discuss in detail the changes that take place during refrigerated storage.

12. a) List out the different freezing methods and the types of freezer. Write briefly about three types of freezers.

(OR)

b) What are the various dehydration techniques? Write notes on air convection dryer and foam mat drying.

13. a) Discuss the principles involved in microwave heating. What are the steps that have to be followed while using a microwave oven?

(OR)

b) What are three types of packaging? Discuss the characteristics of ideal packing material.

14. a) Where does material handling start and why is it crucial in food industry.

(OR)

b) Discuss in detail the functioning of belt conveyor in food industry.

15. a) Define thermal processing of foods. What are the principles of thermal processing?

(OR)

b) What is the principle of distillation? Discuss the importance of centrifugation in food industry.

## PART - C

### ANSWER ANY THREE QUESTIONS

(3X10=30)

16. Discuss the changes that take place in food stuffs while refrigerating.

17. Write in detail the features of a normal drying curve. List out the various changes that take place during dehydration.

18. Explain in detail food safety and wholesomeness of irradiated foods. What are the disadvantages of irradiation?

19. Evaluate the role of material handling in food industry.

20. Enumerate the role of thermal resistance on microorganisms with reference to thermal death time and lethality concept.