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M.Tech. (Food Technology) (2018 Batch) (Sem.-2)**TECHNOLOGY OF FROZEN FOODS****Subject Code : MTFT-528-18****M.Code : 76128****Time : 3 Hrs.****Max. Marks : 60****INSTRUCTIONS TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWELVE marks.

1.
 - a) What is the difference in nutritive value of fresh and frozen foods?
 - b) Write the phenomenon of glass transition. What is the role of glassy state in the stability of frozen foods?
 - c) Explain density, thermal conductivity, specific heat and enthalpy of frozen foods.
2.
 - a) Write a short note on home freezing and home thawing.
 - b) What are the various physical phenomena of heat and mass transfer and ice formation involved in food freezing?
3.
 - a) What could be the various future trend of increasing the content of nutrients and health ingredients in frozen food?
 - b) What is hydro fluidization Freezing and high pressure assisted freezing?
4.
 - a) Classify the frozen retail display. Write about the air distribution in open and close cabinets.
 - b) What are the various pre freezing treatments applied to fruits and vegetables to obtain ready to use products?
5.
 - a) Write down the various stages of freezing process.
 - b) Compare the process of thawing by microwaves and ultrasound.





6.
 - a) Write the effect of freezing on the microorganisms associated with dairy and bakery products.
 - b) What techniques are adopted to freeze the small meat products?
7.
 - a) How is the type of wrapping/packaging influence the frozen storage life of meat?
 - b) Write about the bulk storage room and controlled atmosphere storage.
8.
 - a) Write about the dynamic and static freezing of ice cream.
 - b) What are the various types of physical changes occur during frozen storage?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

