**ST. JOSEPH’S UNIVERSITY, BENGALURU-27**

Registration Number:

Date & session:

**M.Sc (FOOD SCIENCE AND TECHNOLOGY) – 2nd SEMESTER**

**SEMESTER EXAMINATION: APRIL 2024**

**(Examination conducted in May/June 2024)**

**FST 2322-TECHNOLOGY OF FRUITS AND VEGETABLES**

**(For current batch students only)**

**Time: 2 Hours Max Marks: 50**

**This paper contains 1 printed page and FOUR parts**

1. **Answer any Four of the following 3×4=12**
2. What is Hazen unit?
3. Write a note on Fluidized Bed Drying.
4. List the FPO Specification for RTS beverages.
5. Mention the significance of Hypobaric Storage in Fruits and Vegetables.
6. What are the different methods of exposing solid matter to heated air in Adiabatic Drying?
7. Write a note on value added products from fruit and vegetable wastes.

**II. Answer any Two of the following 5×2=10**

1. Write notes on Cryogenic Freezing and its applications.
2. Describe the different stages of sugar during Candy making.
3. Write notes on the parts, functions and health benefits of Cashewnuts.

**III. Answer any Two of the following 10×2=20**

1. Discuss in detail the different techniques for Determination of Starch in fruits and vegetables.
2. Describe the process of Jelly making with theories of gel formation.
3. Give the principle, types and various steps involved in the process of IQF.

**IV. Answer the following 8×1=8**

1. Pomegranates are a type of fruits that has seeds produced from the matured ovary of a single flower, and the seeds are protected inside the fruit.
   1. Which category of fruits does pomegranate belong to? What are the characteristics of fruits belonging to this category? 2
   2. Discuss in detail the processing of any Pomegranate based product with appropriate FSSAI specifications. 4
   3. Discuss in detail the importance of processing fruits and vegetables. 2