

M.VOC. 1ST SEMESTER EXAMINATION-2022

Department of Nutrition, Mugberia Gangadhar Mahavidyalaya

**PAPER-FUNDAMENTALS OF FOOD TECHNOLOGY -II (FTNM12T)
[THEORY]**

Full Marks: 40 Time: 2 Hours

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

1. Answer any five questions. 5x2
 - a. How do we can determine specific gravity of a granular insoluble solid that is lighter than water?
 - b. What is thermister?
 - c. How raw material availability influences plant size and capacity?
 - d. Differentiate between documents and records.
 - e. What is nectar?
 - f. Why fillers are added in baking powder?
 - g. Write the changes in pectic substances in fruits during the ripening.
 - h. Describe the application of Beer-Lambert's Law in spectrophotometer.

2. Answer any four questions 4x5
 - a. Write a brief description about thermocouple & LVDT gauge.(2.5+2.5)
 - b. How do we can treat liquid and gaseous waste in food plant industry?
 - c. Describe sugar batter method for cake manufacturing process.
 - d. Briefly describe the tempering step involved in chocolate manufacturing process.
 - e. What are the characteristics of hard wheat flour and soft wheat flour?
 - f. Write the importance of blanching operation during vegetable processing.

3. Answer any one question. 10x1
 - a. A platinum resistance thermometer has resistance of 3.8 ohm at 0 °C and 5.8 ohm at 100°C. Calculate the temperature when resistance thermometer indicated as 6.8 ohm.
Define vacuum, absolute and gauge pressure.
Write short note on HPLC. (4+2+4)

 - b. With a flow diagram briefly describe main processing steps involved in black tea processing. 10