M.VOC. 1ST SEMESTER EXAMINATION-2021

Department of Food Technology and Nutrition, Mugberia Gangadhar Mahavidyalaya

PAPER- FUNDAMENTALS OF FOOD TECHNOLOGY-II (MVFTNMS12T)
[THEORY]
Full marks - 30 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. [2×5=10]

a) How can we determine specific gravity of a granular insoluble solid lighter than water?
b) What is Thermister?
c) How raw material availability influence plant size and capacity?
d) Define LD50
e) Explain any two functional areas of ERP.
f) Write down principles of HACCP?
g) Write down any two differences between milk chocolate and dark chocolate
h) What is stalling of bread?
i) What is crystallization of sugar?

2. Answer any two questions. [5×2=10]

a) Write a brief description about i.Thermocouple, ii. Strain gauge. (2.5+2.5)
b) Explain the waste treatment in food plant industry. (5)
c) What are the purposes of documentation? (5)
d) What are natural and synthetic beverages? Write the difference between straight dough and sponge dough method? (2+3)

3. Answer any one question. [10×1]

a) 1)A platinum resistance thermometer has resistance of 3.8 ohm at 0 degree centigrade and 5.8 ohm at 100 degree centigrade. Calculate the temperature when resistance thermometer indicated as 6.8 ohm. (4)
2) A sharp edged circular orifice meter is to be used to measure the flow rate of water at 20degree centigrade in a pipeline with an internal diameter of 250 mm. The orifice diameter is 50 mm. The reading of a mercury manometer at a throat tap position is 242 mm. Calculate the flow rate. (given density of water=1000 kg/m^3, viscosity of water= 1 m. Pa-s.) (6)

b) Write the methods of controlling noise hazards in industry. Explain dose-response relationship from the view point of toxicity assessment. (5+5)