

## Mugberia Gangadhar Mahavidyalaya

B.Voc

1<sup>st</sup> Semester Examination 2020-21

Subject- Food Processing

Paper- Food Chemistry (BVFPS105T)

Full marks-30.

Time: 2 hours

[Theory]

**1. Answer the following questions (any 5)**

**[5×2=10]**

- a) Why are the trace elements named so?
- b) “Proteins are amphoteric in nature”- Explain.
- c) What does a high saponification number and a high iodine value of a fat indicate?
- d) What is meant by Denaturation of Protein?
- e) Give an example of Reducing Sugar and Non-Reducing Sugar
- f) What do you mean by IMF?
- g) Why arachidonic acid belongs to Omega-6, while linolenic acid to Omega-3 families of fatty acids?
- h) Define Hydrogenation of Fats and Oils.

**2. Briefly answer the following questions (any 2):**

**[2×5=10]**

- a) Write in brief the effect of food processing on vitamins and minerals.
- b) Write the significance of Sorption-Desorption Isotherms.
- c) Write Short note on Essential Amino acids
- d) Discuss about Oxidative and Hydrolytic Rancidity of fats and oils.

**3. Answer the following questions (any 1):**

**[1×10=10]**

- a) Explain Non enzymatic Browning in food. How will you prevent enzymatic browning reactions? Mention two areas of Food processing where browning reaction is desirable (2+6+2)
- b) Give brief description of the following: (5+5)
  - i. Dextrinization
  - ii. Gelatinization