

**ASSIGNMENT SET - II**  
**Department of Nutrition**

**Mugberia Gangadhar Mahavidyalaya**



**Subject- B.Voc. in Food Processing**

**Semester-I**

**Paper Code: BVFPS105T**

**[FOOD CHEMISTRY]**

**Answer all the questions**

**Unit-1**

1. Why hard water is not used for washing clothes?
2. Why does ice float on water?
3. List the unusual properties of water.
4. Write notes on drinking water and mineral water.
5. Write the role of hydrogen bonding in water.
6. Why rivers do not freeze from the bottom up?
7. Define the following terms. a) Hard water b) Soft water c) Portable water.
8. Give a detailed account on chemical and physical properties of water.

**Unit-2**

1. Write the difference between gelatinization and retrogradation.
2. Write a short note on dextrinization.

3. What do you mean qualitative quantitative tests of carbohydrate? Explain it with your own words?

### **Unit -3**

1. Write a short note on enzymatic browning and non-enzymatic browning.
2. Write a difference between enzymatic browning and non-enzymatic browning.
3. Write the advantages and disadvantages of browning.
4. What do you mean factors effecting enzyme activity?

### **Unit-4**

1. What do you mean fat?
2. Define structure of fat.
3. Write the composition of fat.
4. Write the source and function of fat.
5. Briefly discuss the classification of fat.
6. Write a short note on essential fatty acids.

### **Unit -5**

1. What is beriberi?
2. What are two active forms of niacin?
3. What are the two coenzyme derivatives of riboflavin?
4. Name the active form of vitamin Bs that occurs in our body.
5. Which compounds/conditions lead to the destruction of vitamin E?
6. What is a Couriering system?
7. Write down the chemical name of vitamin A. What factors lead to its destruction?
8. Which vitamin is required for normal reproduction? List a few foods rich in the vitamin of the vitamins B<sub>1</sub>, B<sub>2</sub> and B<sub>3</sub>, which is the most stable one?

9. Which vitamin is required for normal vision? Why beta-carotene is called pro-vitamins A? List a few foods rich in beta-carotene.
10. List any two properties of vitamin D to indicate that it is much more stable vitamin than vitamin A.
11. What is the chemical nature of ascorbic acid? Why it has reducing property? List a few foods rich in ascorbic acid
12. What are the roles of vitamin B<sub>12</sub> in the human system? List a few dietary sources of the vitamin.

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