



KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Food Technology) 2021 Admission
III Semester Final Examination – February 2023

Pafe.2114

Food Chemistry of Micronutrients (2+1)

Marks: 50
Time: 2 hours

I Fill in the blanks

(10x1=10)

1. Turmeric contains the compound -----.
 2. Expand FDA
 3. Pineapple contains the enzyme -----.
 4. Antinutritional factor present in soya bean -----.
 5. Pungent principle present in chilli pepper -----.
- State True or False**
6. Enzymes are protein in nature.
 7. Ferrous sulphate is used in fortification of wheat flour.
 8. Minerals are not affected by heat treatment when compared to vitamins.
 9. Quinine is used in soft drinks to give tart - sweet attributes.
 10. The structure of carotenoid consists of isoprene units.

II Write short notes on ANY FIVE of the following

(5x2=10)

1. Name any four enzymes used in milk and dairy products.
2. Explain the term fortification and enrichment of vitamins.
3. List the pigments comes under flavonoids.
4. What are tannins? Give two groups of tannins.
5. Write any four plants which have sulfur containing compounds.
6. Explain maillard browning reaction.
7. List any two foods rich in calcium and iron.

III Answer ANY FIVE of the following

(5x4=20)

1. Explain Food Additives, their functions and regulating aspects.
2. Write a short note on the optimization and retention of vitamins in food during processing
3. Explain the regulatory aspects of food colourants.
4. Write a short note on the role of protease enzyme in food industry.
5. Describe the philosophy and definitions of flavor.
6. Explain the changes in heme pigment which occur curing of meat.
7. Briefly write the technologies adopted for the retention of natural colours in foodstuffs.

IV Write an essay on ANY ONE of the following

(1x10=10)

1. Explain the role of endogenous enzymes in food quality.
2. Write in detail about the antinutritional factors present in foods.
