



**KERALA AGRICULTURAL UNIVERSITY**  
**B.Tech.(Food Technology) 2022 Admission**  
**III Semester Final Examination – February 2024**

Pafe.2109

**Food Additives and Preservatives (1+1)**

**Marks: 50**  
**Time: 2 hours**

- I Fill in the blanks** **(10x1=10)**
1. The acid present in tamarind is .....
  2. The red color of beet is due to the presence of ..... pigment.
  3. .... help in maintaining/ controlling the acidic / alkaline changes during food processing and hence maintain flavor and stability.
  4. 4% commercially available acetic acid is called .....
  5. According to FSSAI, nicin comes under class ..... preservative.
- State True or False**
6. Rhodamine is not permitted to use as food coloring agent.
  7. Sulphur dioxide cannot be used to preserve naturally colored juices due to its bleaching action.
  8. Stabilizers and Emulsifiers are certain examples of food additives.
  9. Direct food additives become a part of the food during packaging. These are in trace amounts.
  10. Sequestrants are added in food to keep the food oxidized.
- II Write short notes on ANY FIVE of the following** **(5x2=10)**
1. Distinguish between intentional and unintentional food additives with examples.
  2. List any four natural pigments.
  3. Mention the role of food preservatives with two examples.
  4. Define anti-caking agents with example.
  5. What is meant by chelating agents?
  6. Define umami flavor with an example.
  7. Expand and define GRAS.
- III Answer ANY FIVE of the following** **(5x4=20)**
1. Classify food additives based on sources.
  2. List out the importance of food colorants.
  3. Write a note on food thickeners.
  4. Why are flour bleaching agents used? Give two examples.
  5. Write a short note on fat substitutes.
  6. Mention the functions of acidity regulators.
  7. Describe about emulsifiers used in food processing.
- IV Write an essay on ANY ONE of the following** **(1x10=10)**
1. Explain the role of antioxidants, calorie and low calorie sweetening agents in food processing along with suitable examples.
  2. Describe about synthetic food colors with suitable examples and also elaborate its adverse effect on health.

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