



Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD)
Re-accredited with 'A++' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

CIA Test I –August, 2025

SEMESTER - III

Class : II UG
Major : Chemistry, BC/BT, FSMD, Comp. Science

Time : 2 hours
Max. Marks : 60

23BCHVB1 –Food Chemistry

Course Outcomes : On completion of this course, the students will be able to

1. Understand types of food additives
2. Demonstrate the role of food colours, flavoring agents and preservatives and their health effects.
3. Investigate adulterants present in food by various methods.
4. Understand the principles involved in instrumental methods of analysis of food
5. Interpret rights of a consumer in maintaining the food standards and minimizing adulterants of food stuffs.

Part - A

6 x 1 = 6

Choose the correct answer

1. The antioxidant that is used in food is CO1K2
a. Sorbic acid b. Ascorbic acid c. Citric acid d. Lactic acid
2. The ----- enhances the stability of food by reducing metal contaminants CO1K1
a. BHT b. MSG c. EDTA d. BHA
3. Pick out the natural preservative CO2K1
a. Sodium Benzoate b. Sulphur dioxide c. Sodium nitrite d. Vinegar
4. Pick out the Inorganic preservative CO2K2
a. Sugar b. Salt c. Sulphur dioxide D. Vinegar
5. The colouring agent which acts as antioxidant is CO2K2
a. Carotenoid b. Sunset Yellow c. Tetrazine d. Allura red
6. The common adulterant in Ghee is CO3K2
a. Oil b. Vanaspati c. Mineral oil d. Brominated Vegetable oil

Part - B

3 x 6 = 18

Answer the following questions

(Answer should not exceed 400 words)

7. a. Discuss about the method of detection of salicylic acid in beverages. CO1K2
(or)
7. b. How will you detect the presence of borates in beverages CO1K3
8. a. Classify the food colours based on source. CO2K2
(or)
8. b. Discuss about the colour retention agents and their role, type and examples. CO2K3
9. a. Briefly account into Chromophore- Auxochrome theory of food colours. CO2K3
(or)
9. b. Discuss in detail about the intentional and incidental adulterants. CO3K2

Part - C

3 x 12 = 36

Answer the following questions

(Answer should not exceed 800 words)

10. a. Explain in detail about the types of food additives based on function with suitable examples. CO1K4
(or)
10. b. Define the following with examples CO1K3
(i) Humectants (ii) Antifoaming agents (iii) Buffering agents (iv) Leavening agents
11. a. What is preservative? Explain in detail about the classification of preservatives. CO2K3
(or)
11. b. State and explain the chemistry of food flavouring agents. CO2K3
12. a. Define class I & Class II preservatives & their health effects CO2K2
(or)
12. b. Discuss in detail about contaminants of food with toxic chemicals, pesticides and insecticides CO3K3

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