

# KAMARAJ COLLEGE (Autonomous)

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(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

(4 Pages)

Reg. No:.....

Question Code: 26E00304

Course Code : 24USCH11/25USCH11

UG Degree - End Semester Examinations, April 2026

First Semester  
B.Sc., CHEMISTRY  
Food Chemistry

(For those who joined in July 2024 and June 2025 onwards)

Time : 3Hours

Maximum : 75 Marks

## PART - A (10 × 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer :

CO:1 1. \_\_\_\_\_ are the sugars or polymer of sugars.

- K:1 (a) Proteins (b) Carbohydrates  
(c) Minerals (d) Vitamins

CO:1 2. The iodine number of pure cow ghee is

- K:1 (a) 34.00 (b) 36.50  
(c) 38.10 (d) 38.70

CO:2 3. The symptom for food poisoning is

- K:2 (a) abdominal pain (b) diarrhea  
(c) fever (d) all the above

CO:2 4. Malathion belongs to \_\_\_\_\_ insecticide.

- K:1 (a) Organo chlorine (b) Organo phosphorous  
(c) Carbamate (d) Coumarin derivative

CO:3 5. The main function of preservatives in food is to \_\_\_\_\_.

- K:1 (a) improve the taste (b) increase the self - life  
(c) enhance the colour (d) reduce the fat content

CO:3 6. Sweeteners have beneficial effects for

- K:2 (a) Diabetes mellitus (b) Hyper tension  
(c) Diarrhea (d) Typhoid fever

- CO:4 7. Advantages of carbonation is  
K:1 (a) sparkling and taste (b) aerobic condition  
(c) preservation (d) all the above
- CO:4 8. What is the process called that converts sugar into alcohol in wine  
K:2 making?  
(a) Fermentation (b) Distillation  
(c) Carbonation (d) Pasteurization
- CO:5 9. The saponification of a fat or oil is done using \_\_\_\_\_ solution  
K:2 for cold process.  
(a) HCl (b) NaOH  
(c) KOH (d) NaCl
- CO:5 10. The purity of fats and oils are determined by  
K:1 (a) iodine value (b) saponification value  
(c) R.M value (d) all of these

**PART - B (5 X 5 = 25 Marks)**

**Answer ALL Questions choosing either (a) or (b).**

**Answer should not exceed 250 words.**

- CO:1 11. (a) Classify food based on its origin and nutrition group.  
K:3 **(OR)**  
(b) Identify any two adulterants in ghee and elaborate how to detect them?
- CO:2 12. (a) Discuss the effects of exposure to Malathion and BHC.  
K:4 **(OR)**  
(b) Infer the general steps to follow as first aid to treat poison consumed victims.
- CO:3 13. (a) Identify the role of artificial sweetener in food and highlight  
K:4 the uses with any two examples.  
**(OR)**  
(b) Analyze the need of emulsifying agents in food.
- CO:4 14. (a) Differentiate alcoholic beverages from non-alcoholic  
K:3 beverages with suitable examples.  
**(OR)**  
(b) Is soft drink a threat for healthy life? Justify.

CO:5 15. (a) Distinguish saturated and unsaturated fats with examples.

K:4

**(OR)**

(b) How will you produce refined cotton seed oil?

**PART - C (5 X 8 = 40 Marks)**

**Answer ALL Questions choosing either (a) or (b).**

**Answer should not exceed 500 words.**

CO:1 16. (a) How will you identify the presence of adulterants in the following?

K:4

- |          |           |
|----------|-----------|
| 1. Wheat | 3. Milk   |
| 2. Rice  | 4. Butter |

**(OR)**

(b) Deduce the methods for detection of adulterated foods by simple analytical technique.

CO:2 17. (a) Discuss the natural poisons found in food.

K:3

**(OR)**

(b) Identify the first aid technique followed in the following conditions:

- i) Poison inhaled by a person
- ii) Presence of poison in eye

CO:3 18. (a) Interpret the role of preservatives in food.

K:5

**(OR)**

(b) Analyze the use of baking powders and taste makers in food and highlight its advantages and disadvantages.

CO:4 19. (a) Discuss the methods of carbonation.

K:4

**(OR)**

(b) Explain the disease of liver and social problems due to alcoholism.

CO:5 20. (a) How will you determine RM value? Outline its significance.

K:5

**(OR)**

(b) Evaluate the Role of MUFA and PUFA in preventing heart diseases.