# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

#### **B.Sc.** DEGREE EXAMINATION - **CHEMISTRY**

### FOURTH SEMESTER - APRIL 2023

### 16UCH4ES01 – CHEMISTRY OF FOOD AND CONSUMER PRODUCTS

Date: 11-05-2023	Dept. No.	Max. : 100 Marks
Time: 09:00 AM - 12:00 NOON		

#### PART - A

## Answer all the questions.

 $(10 \times 2 = 20)$ 

- 1. What are artificial sweetening agents? Give example.
- 2. Write the significance of Maillard reaction.
- 3. Define rancidity of fats.
- 4. Define Iodine number of oil.
- 5. Write the demerits of fast food.
- 6. Mention the factors influencing BMR.
- 7. List the common adulterants in species and vegetable oil.
- 8. Name the ingredients used in the preparation of lipsticks.
- 9. Mention the composition of Nail Polish.
- 10. Write a note on biodegradation of detergents.

### **PART-B**

## Answer any EIGHT questions.

 $(8 \times 5 = 40)$ 

- 11. Explain the effects of cooking on rice and legumes.
- 12. Describe the sources and functions of basic five food groups.
- 13. List the sources, functions, bioavailability and deficiency of calcium, iron and iodine.
- 14. Discuss the steps involved in the cultivation of mushroom and its types in detail.
- 15. Explain about the different stages of growth of bacteria in food with a neat sketch.
- 16. Explain the biological functions and applications of antioxidants.
- 17. List the sources, functions, bioavailability and deficiency of fat soluble vitamins.
- 18. Differentiate soaps and detergents.
- 19. How do AGMARK and FSSAI play vital roles in ensuring the quality of food?
- 20. Discuss the role of food colorants.
- 21. How will you check the adulterants found in Milk, Turmeric, Sugar, edible oil and Tea powder?
- 22. Describe the cleansing action of soap

### **PART-C**

# Answer any FOUR questions.

 $(4 \times 10 = 40)$ 

- 23. What is enzymatic browning? Explain its mode of action and prevention in fruits and vegetables.
- 24. Explain the following
  - i) MUFA ii) acid number of an oil iii) fortification of foods iv) dehydrated fruits.  $(2.5 \times 4 = 10)$
- 25. Mention the importance of tetra pack and nitrogen preservation in food processing.
- 26. Write a note on antihairfall and baby shampoos.
- 27. Explain the classification and functions of detergents.
- 28. Enumerate the ingredients used for sunscreen lotion preparation and explain the significance of UV absorbers in it.

#### **\$\$\$\$\$\$\$**