

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2008–09)

SUBJECT CODE : VC/AC/FC13

B.Sc. DEGREE EXAMINATION, NOVEMBER 2008
BRANCH IV – CHEMISTRY
BRANCH V (A) - PLANT BIOLOGY & PLANT BIOTECHNOLOGY
BRANCH VI – (A) ADVANCED ZOOLOGY AND BIOTECHNOLOGY
FIRST SEMESTER

COURSE : ALLIED - CORE
PAPER : FOOD CHEMISTRY & BASIC NUTRITION
TIME : 2½ HOURS

MAX. MARKS : 100

SECTION – A

(10X3=30)

ANSWER ALL QUESTIONS

1. Define Saponification value of an oil.
2. What is rancidity?
3. Mention artificial sweetening agents.
4. Comment on Enzyme browning.
5. List the factors affecting enzyme action.
6. Define the terms 'Macronutrients' and 'Micronutrients'.
7. Explain the effect of cooking on Carbohydrates.
8. Write a note on food guide.
9. Explain the terms Calcium Rigour and Tetany.
10. Mention any three non-permitted food colours.

SECTION – B

ANSWER ANY FIVE QUESTIONS

(5X6=30)

11. Define BMR and mention the factors affecting it.
12. Explain Oil processing and add a note on Emulsifiers.
13. Describe fortification of food with Vitamins and Minerals.
14. Explain the reactions of carbohydrates.
15. Discuss the importance of Iron requirement in different physiological age groups.
16. Write briefly about digestion of Carbohydrates.
17. Explain the functions of Vitamin A and Vitamin D.

SECTION – C

ANSWER ANY TWO QUESTIONS

(2X20=40)

18. a) Give a detailed account of spices and Condiments.
 b) Discuss the role of pigments in food.

19. Explain Protein Calorie Malnutrition with reference to
 a) Kwashiorkor and Nutritional Marasmus.
 b) Outline the measures to overcome malnutrition

20. Give an account of classification, functions and storage of Fats.

21. a) Mention the bioavailability, sources and functions of Calcium and sodium.
 b) Give the function and Deficiency diseases of Vitamin K, Vitamin C and
 Vitamin B₁₂ and B₆.

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