

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

SUBJECT CODE : VC/AC/FC13

B.Sc. DEGREE EXAMINATION, NOVEMBER 2009
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 'Water activity'.
2. Define : Nutrition and Nutrients.
3. Give the sources of Vitamin A and Vitamin E.
4. Give any two colour reactions of fructose.
5. Name any three artificial sweeteners.
6. What are emulsions and emulsifiers?
7. What are the effects of cooking on carbohydrates?
8. Define 'Isoelectric point' of an amino acid.
9. What is enzymic browning?
10. What are peptides?

SECTION – B

ANSWER ANY FIVE QUESTIONS

(5X6=30)

11. Explain the Basic Five Food groups and the usage of food guide
12. Describe the factors affecting Enzyme activity.
13. Define BMR and how is BMR determined?
14. Discuss any three reactions of glucose.
15. Write a note on the sources, functions and bio availability of calcium
16. Write a note on digestion and absorption of food in the body.
17. Describe the classification of lipids.

SECTION – C

ANSWER ANY TWO QUESTIONS

(2X20=40)

18. Discuss the sources, functions and deficiency symptoms of Vitamin D, Vitamin C, Iodine and Iron. (20)
19. a) Write a note on chemistry of fats and oil processing.
b) Discuss any five colour reactions of proteins. (10+10)
20. a) Discuss the symptoms and causes of Malnutrition. Explain the measures to control malnutrition.
b) Write a note on fortification of food with vitamins and minerals. (10+10)
21. a) Discuss the moisture content in foods and the role of water in food preparation
b) Write a note on rancidity of fats
c) Give an account of Enzymes used in food processing. (8+6+6)

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