

**STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 86**  
**(For candidates admitted during the academic year 2019-20 & thereafter)**

**SUBJECT CODE: 19CH/PE/FN23**

**M. Sc. DEGREE EXAMINATION, APRIL 2021**  
**BRANCH IV- CHEMISTRY**  
**SECOND SEMESTER**

**COURSE: ELECTIVE**

**PAPER : FOOD CHEMISTRY AND NUTRITION**

**TIME : 90 MINUTES**

**Max Marks: 50**

**SECTION A**

**Answer All Questions**

**(11 X 1 = 11 marks)**

**I Choose the correct answer**

- The definition of calorie is  
a) Heat needed to raise temperature of 1 gram of water 1<sup>0</sup>C b) 1/10 of a pound  
c) heat needed to raise 1 pound of organism 1<sup>0</sup>C d) none of the above
- Which of the following is not true about dietary fats?  
a) They are present in cell membranes b) they absorb fat-soluble vitamins  
c) they help the body absorb calcium d) they help in making hormones
- Dairy products, salmon, and tofu are all good sources of  
a) Potassium b) Zinc c) Calcium d) carbohydrates
- Foods such as fruit, honey, and sugar cane are all good examples of  
a) nutrients b) sugars c) vitamins d) hypoglycemics

**II Fill in the blanks**

- Marasmus is caused by \_\_\_\_\_
- Kwashiorkor is due to the deficiency of \_\_\_\_\_
- Fish Liver oil is rich in \_\_\_\_\_
- \_\_\_\_\_ reduces the BMR

**III Answer in a line or two**

- Differentiate between visceral and subcutaneous fat.
- Define Glycemic index.
- What is Protein Energy Malnutrition?

## SECTION B

Answer any three questions

(3 X 8 = 24 marks)

12. Explain the significance of the food guide and how is it used? (8)
13. How are dietary fats related to coronary heart diseases? (8)
14. Give a detailed account on the sources, chemical classification and functions of lipids. (8)
15. Discuss the functions and deficiency symptoms of fat soluble vitamins. (8)

## SECTION C

Answer any one question

(15 X 1 = 15 marks)

- 16 a) Give a detailed explanation of Recommended Dietary Allowances (RDA) and its significance for different nutrients. (8)
  - b) What are the significant functions of Food and Nutrition Board in combatting Malnutrition? (7)
- 17 a) What are the dietary sources of phosphorous and explain their functions in our body? (7)
  - b) Elaborate on the sources, classification and the significant functions of protein. (8)

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