

TB175335V

Reg. No : .....

Name : .....

**B. Sc. DEGREE (C.B.C.S.S) EXAMINATION, NOVEMBER  
2022 2015, 2016 & 2017 Admissions Supplementary  
SEMESTER V - CORE COURSE (HOME SCIENCE)  
HS5BT06B - HUMAN NUTRITION AND BIOCHEMISTRY**

**Time : 3 Hours**

**Maximum Marks : 60**

**Part A**

**I. Answer all questions. Each question carries 1 mark (5x1=5)**

1. Comment on the benefits of consuming a balanced diet.
2. Write a note on Physical Activity Level (PAL)?
3. What are non-starch poly saccharides?
4. What is fluorosis?
5. What is gestational diabetes?

**Part B**

**II. Answer any Five questions. Each question carries 2 marks (5x2=10)**

6. What is menu planning?
7. List four factors influencing BMR.
8. Differentiate between dietary fibre and crude fibre
9. Write a note on water balance.
10. What is the role of vitamin K in the body?
11. What are the functions of folic acid ?
12. List four advantages of Breast feeding.
13. Write a note on junk foods.

**Part C**

**III. Answer any Five questions. Each question carries 5 marks (5x5=25)**

14. Discuss Food Groups and their role in planning a balanced diet.
15. Comment on the use of the food guide pyramid with a neat depiction of the same.
16. How do you determine the energy value of food? Explain the principle and draw the diagram of the instrument used.
17. Discuss the functions of proteins.
18. What are the factors affecting iron absorption?
19. Explain the effects of deficiency of vitamin D in children.
20. Plan day's diet for a pre school going child and justify.
21. Elaborate on the dietary guidelines for preschool children.

**Part D**

**IV. Answer any Two questions. Each question carries 10 marks (2x10=20)**

22. Explain the determination of energy value of food and differentiate between physiological fuel value and gross fuel value.

23. Explain classification and enumerate functions of carbohydrates.
24. Explain the interrelationship of calcium, phosphorous and vitamin D.
25. Explain nutrient requirements of a lactating mother and dietary modifications to meet the requirements.