B. Sc DEGREE (C.B.C.S.S) EXAMINATION Fifth Semester – October 2016 Core course -HSC5HNB -HUMAN NUTRITION AND BIOCHEMISTRY

(For B. Sc Home Science- 2015 admissions)

Time: 3 hours Maximum: 60 marks

Part A (Short Answer Questions)

Answer all questions. Each question carries 1 mark

- 1. Give the RDA for calcium in lactation.
- 2. Give the calorific values of macronutrients.
- 3. What is PUFA?
- 4. Write a brief note on zinc deficiency.
- 5. What is rickets?

(5x1 = 5 marks)

PART B (Brief Answer Questions)

Answer any 5 out of 8 questions. Each question carries 2 marks

- 6. List the factors that affect RDA.
- 7. What is meant by physiological fuel value of foods?
- 8. Write any 4 important functions of carbohydrates.
- 9. Write a note on essential fatty acids.
- 10. What is a food guide pyramid?
- 11. Explain the effect of deficiency of biotin.
- 12. What is hyperkalemia?
- 13. What is the need for weaning?

 $(5 \times 2 = 10 \text{ marks})$

PART C (Essay)

Answer any *five out of eight* questions. Each question carries 5 marks

- 14. What are the future challenges for nutrition research in Kerala.
- 15. Explain the factors affecting BMR.
- 16. Describe transamination and deamination reactions with suitable examples.
- 17. Explain how water balance is regulated in the human body.

(P.T.O)

- 18. Explain the Vitamin D deficiency disorders.
- 19. What is the importance of extrinsic factor?
- 20. Bring out the consequences of iron deficiency.
- 21. Discuss the significance of exclusive breast feeding for an infant.

 $(5 \times 5 = 25 \text{ marks})$

PART D

Answer any two questions out of four. Each question carries 10 marks

- 22. Define BMR. Describe different methods for measurement of BMR.
- 23. Explain -oxidation of fat metabolism.
- 24. Write a note on the role of Vitamin D in maintaining blood calcium levels.
- 25. Write a note on the nutrient requirements of a lactating woman and mention the dietary modifications.

 $(2 \times 10 = 20 \text{ marks})$