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 iron for a pregnant woman.
- 2. Define Gross Calorific Value.
- 3. What are ketone bodies?
- 4. What is the role of sodium?
- 5. What is weaning?

(5x1 = 5 marks)

PART B (Brief Answer Questions)

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

- 6. Define Indian Reference Man.
- 7. What are the pre gastric factors affecting food intake?
- 8. Give the nutritional classification of amino acids.
- 9. What is PUFA? Give 2 foods rich in PUFA.
- 10. List out the functions of Vitamin K.
- 11. What is egg white injury factor?
- 12. What are goitrogens?
- 13. What are the requisites of a packed lunch for a school going child?

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

PART C (Essay)

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

- 14. Discuss the current nutrition scenario in India.
- 15. Explain the principle and working of the bomb calorimeter.
- 16. Explain the types of dietary fibre and bring out its potential health benefits.

(**P.T.O**)

- 17. Explain the consequences of water imbalance in the human body.
- 18. Explain the functions of Vitamin A.
- 19. Explain the functions of thiamine.
- 20. Bring out the role of calcium.
- 21. Plan a day's diet for a preschool child. Justify.

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

PART D

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

- 22. Describe the components of energy expenditure. Discuss the factors affecting it.
- 23. Explain the methods of evaluating protein quality.
- 24. Write a note on the antioxidant role of vitamins in the human body.
- 25. Explain the physiological changes in old age and related nutritional requirements.

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