

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. Define food security.
- 2. Write a note on physiological value of foods.
- 3. What are essential amino acids?
- 4. What is fluorosis?
- 5. What are lactogogues?

(5x1 = 5 marks)

PART B (Brief Answer Questions)

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

- 6. What is RDA? Give the RDA for protein in pregnancy and lactation.
- 7. What is DLW technique?
- 8. What is Glycemic Index? Give any 2 examples of low glycemic index foods.
- 9. What are the types of lipoproteins?
- 10. Explain the signs and symptoms of iron deficiency anemia.
- 11. Bring out the role of folic acid.
- 12. List the factors that decrease and increase calcium absorption in the small intestine.
- 13. What is gestational diabetes?

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

PART C (Essay)

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

- 14. Write a note on the current food security situation in India.
- 15. What is thermic effect of food? What are the factors affecting it?
- 16. What are essential fatty acids? Bring out its significance.

(P.T.O)

- 17. Enumerate the functions of water in the human body.
- 18. Explain the antioxidant role of Vit.E in free radical scavenging.
- 19. Explain niacin deficiency disorders.
- 20. Explain the problems related to iodine deficiency.
- 21. What are the factors affecting food habits of adolescents?

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

PART D

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

- 22. Explain the methods for estimating energy expenditure.
- 23. Explain glycolytic pathway.
- 24. Write a note on the deficiency disorders of Vit A in the human body.
- 25. Write a note on the nutrient requirements of a pregnant woman and mention the dietary modifications.

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