TB214630W Reg. No :.....

Name																		
Name		•		٠	٠	٠		٠	٠		٠			٠	٠	٠	٠	

## B.Sc. DEGREE (C.B.C.S.) EXAMINATION, MARCH 2023

(2021 Admissions Regular, 2020 Admissions Supplementary / Improvement)
SEMESTER IV - COMPLEMENTARY COURSE 1 (NUTRITION AND DIETETICS)
ND4C07B20 - BIOCHEMICAL ASPECTS OF NUTRITION

Time: 3 Hours Maximum Marks: 80

#### Part A

# I. Answer any Ten questions. Each question carries 2 marks

(10x2=20)

- 1. Write about the excretion of calcium from the body.
- 2. Define hyperphosphatemia.
- 3. Write the factors affecting calcium absorption.
- 4. What are the symptoms of goiter? What are goitrogens?
- 5. Discuss the role of various factors on zinc absorption.
- 6. Discuss the functions of manganese.
- 7. What is egg white injury?
- 8. Explain the major sources of vitamin K.
- 9. Discuss the functions of folate and cyanocobalamin.
- 10. Discuss the role of manganese and zinc in energy metabolism.
- 11. Discuss any two functions of biotin in macronutrient metabolism.
- 12. Discuss the significance of lipids in diet in terms of micronutrient absorption.

#### Part B

### II. Answer any Six questions. Each question carries 5 marks

(6x5=30)

- 13. Explain the functions of calcium.
- 14. Write the mechanism of calcium absorption and excretion.
- 15. Explain the sources and role of fluorine in human body.
- 16. Explain the metabolism, transport and functions of manganese.
- 17. Describe the antioxidant activity of selenium.
- 18. Explain visual cycle.
- 19. Enumerate the various sources of fat-soluble vitamins.
- 20. Enumerate the various functions of vitamin C.
- 21. Explain why incorporation of vitamin C in diet is recommended for anemic patients.

# Part C

### III. Answer any Two questions. Each question carries 15 marks

(2x15=30)

- 22. Explain calcium absorption, excretion and factors affecting the same.
- 23. Explain the absorption, excretion and toxicity of zinc.
- 24. Describe in detail the deficiency and toxicity of vitamin A.
- 25. Explain the role of micronutrients in the metabolism of macronutrients with examples.