



Reg. No	,
Name	

# M.Sc. (BIOCHEMISTRY) DEGREE [C.S.S.] EXAMINATION, MAY 2020

#### Fourth Semester

# BC4M004PE3—NUTRITION, HEALTH AND LIFE STYLE DISEASES

(2012 Admission onwards)

Time: Three Hours Maximum Weight: 30

### Part A (Short Answer Questions)

Answer any **five** of the following. Weight 1 each.

- 1. What is BMI? How is it calculated?
- 2. Give examples of fat substitutes and list their advantages and disadvantages.
- 3. What is the function of water in the diet?
- 4. What are the causes and consequences of childhood obesity?
- 5. "Fructose is more harmful than glucose to a diabetic". Comment.
- 6. Is cholesterol the cause of heart diseases? Give reasons for your answer.
- 7. What are gall stones? How are they formed?
- 8. What are the consequences of HIV infection?

 $(5 \times 1 = 5)$ 

## Part B (Short Essay/Problem Solving Type)

Answer any **five** of the following. Weight 2 each.

- 9. What should a healthy diet contain? Explain.
- 10. What are Kwashiorkor and Merasmus? Explain.
- 11. What is Dietary fiber? What is the role of dietary fiber in nutrition?
- 12. What are the dietary sources, and deficiency disorders of Vitamin A?
- 13. What is "metabolic syndrome"? How is it caused? What are the consequences?
- 14. What are the special nutritional requirements during pregnancy and lactation?

Turn over





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- 15. What is BMR? How is it measured? What are the factors that affect BMR?
- 16. What is the role of antioxidants and phytochemicals in human health?

 $(5 \times 2 = 10)$ 

#### Part C (Long Essay Type)

Answer any **three** of the following in detail. Weight 5 each.

- 17. What is obesity? How is it classified? Explain the mechanisms that lead to obesity. How is obesity treated?
- 18. Discuss the nutritional importance of calcium and iron. Add a note on their deficiency disorders.
- 19. Describe the digestion and absorption of fats. How are short chain and long chain fatty acids transported after they are absorbed?
- 20. What is atherosclerosis? How does it develop? What is the role of fat in heart diseases?
- 21. What is Hepatitis? How is it caused? Comment on alcoholic and non-alcoholic fatty liver.
- 22. Give an account of the etiology, causes and treatment of cancer.

 $(3\times 5=15)$ 

