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19101411

QP CODE: 19101411

Reg No : .....

Name : .....

## B.Sc DEGREE (CBCS) EXAMINATION, MAY 2019

### Fourth Semester

#### Complementary Course - BC4CMT04 - BIOCHEMISTRY- NUTRITIONAL AND CLINICAL BIOCHEMISTRY

(Common for B.Sc Botany Model I, B.Sc Botany Model II Environmental Monitoring And Management, B.Sc Botany Model II Food Microbiology, B.Sc Botany Model II Horticulture and Nursery Management, B.Sc Botany and Biotechnology Model III Double Main, B.Sc Zoology Model I, B.Sc Zoology Model II Aquaculture, B.Sc Zoology Model II Food Microbiology, B.Sc Zoology Model II Medical Microbiology, B.Sc Zoology and Industrial Microbiology Model III Double Main, B.Sc Biological Techniques and Specimen Preparation Model III, B.Sc Biotechnology Model III, B.Sc Botany Model II Plant Biotechnology, B.Sc Biotechnology Model III, B.Sc Microbiology Model III )

2017 Admission onwards

C3C43187

Maximum Marks: 60

Time: 3 Hours

#### Part A

Answer any **ten** questions.

Each question carries **1** mark.

1. Give examples of macronutrients.
2. Give the significance of Biological value of proteins.
3. Name the fat soluble vitamins.
4. Give two functions of blood.
5. Write the functions of basophils.
6. Which are the two blood clotting pathways?
7. What is post analytical errors? Give one example
8. Identify the difference between SGPT and SGOT
9. Relate the role of TSH in thyroid gland. How TSH is measured?
10. Name the enzyme deficient in lactose intolerance.
11. Compare polydipsia and polyphagi.
12. What is meant by primary familial hypercholesterolemia?

(10×1=10)


#### Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Explain Respiratory quotient? What are the factors affecting RQ?
14. Differentiate between essential and nonessential aminoacids.



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15. Which are the water soluble vitamins? Discuss about Vitamin B12.
  16. Compare between fibrinolysis and anticoagulant property of blood
  17. Justify that structure defines the function of hemoglobin.
  18. Interpret how any error will affect the quality of a clinical laboratory
  19. Explain how urine sample is analyzed for biochemical parameters?
  20. Explain in detail the silent features of ketosis.
  21. What are the clinical symptoms of obesity?

(6×5=30)

### **Part C**

Answer any **two** questions.  
Each question carries **10** marks.

22. Explain the Biological and nutritional importance of microminerals.
23. Discuss the significance and functions of plasma proteins.
24. Elaborate RFT
25. What is hypoglycemia? Comment on causes and symptoms of hypoglycemia

(2×10=20)

