Turn Over



Max. Marks: 60



Reg No:Name:

B.Sc DEGREE (CBCS) EXAMINATIONS, OCTOBER 2021

Fourth Semester

Complementary Course - BC4CMT04 - BIOCHEMISTRY- NUTRITIONAL AND CLINICAL BIOCHEMISTRY

(Common for B.Sc Biological Techniques and Specimen Preparation Model III, B Sc Biotechnology
Model III, B.Sc Botany and Biotechnology Model III Double Main, 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 Model II Plant
Biotechnology, B.Sc Microbiology Model III, B.Sc Zoology and Industrial Microbiology 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)

2019 Admission only

B26A0A15

Time: 3 Hours

Part A

Answer any **ten** questions. Each question carries **1** mark.

- 1. Define calorie.
- 2. Give two examples of non-essential fattyacids.
- 3. What are micronutrients?
- 4. What is the normal RBC count in women?
- 5. Which is the globulin fraction having antibody functions?
- 6. Report the substitution mutation in sickle cell anaemia.
- 7. Give the significance of quality control chart.
- 8. Explain the storage processes of blood.
- 9. What are serum transaminases?Classify them.
- 10. What is NIDDM?
- 11. Is ketosis good for your body; justify?
- 12. Classify the types of hyperlipidemia.





 $(10 \times 1 = 10)$

Part B

Answer any **six** questions.

Each question carries 5 marks.

- 13. What are vitamins? Discuss the physiological significance of various vitamins.
- 14. Give a short note on vitamin C and Folic acid.
- 15. Discuss the importance of Sodium and potassium in diet.
- 16. Discuss blood as a connecive tissue.
- 17. Differentiate the functions of thrombin and fibrin in blood clotting.
- 18. What is a reagent strip?Explain how it helps in the analysis of urine.
- 19. Explain renal function tests.
- 20. Outline the biochemical changes in galactosemia patients.
- 21. Explain the causes of atherosclerosis.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **10** marks.

- 22. Define nutritional biochemistry? Discuss on principle foods.
- 23. Explain fibrinolysis? Contrast fibrinolysis with the mode of action of anticoagulants.
- 24. Explain thyroid function tests in detail.
- 25. Explain the biochemical basis and metabolic changes of obesity.

(2×10=20)