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B.Sc. RNLK-/C2T/21

2021

Physiology

[First Semester]

Paper - C2T

Full Marks : 40

Time : 2 hours

*The figures in the right-hand margin indicate marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

1. Answer any five questions from the following.  $5 \times 2 = 10$

- a) What do you understand by nucleosides and nucleotides? 2
- b) What is saponification? 2
- c) What do you mean by amphoteric nature? 2
- d) What is mutarotation? 2
- e) What is chair-boat isomerism? 2

*(Turn Over)*

( 2 )

- f) Write differentiate between reducing and non reducing sugar. 2
- g) Why sucrose is called invert sugar? 2
- h) What is Chargaff's rule? 2

**2. Answer any four questions from the following. 4×5=20**

- a) Write the difference between B-DNA and Z-DNA. 5
- b) Explain about the bonds that stabilize the higher structure of proteins. 5
- c) What do you mean by salting in and salting out?  
2½+2½
- d) Write short note on iso-electric point of protein and its importance? 5
- e) What do you mean by Acid number? What are sphingomyclins? 2+3
- f) Explain about pyranose & furanose isomerism.  
2½+2½

( 3 )

**3. Answer any one questions from the following.  $1 \times 10 = 10$**

a) Write about the structure of t-RNA with suitable diagram? Explain the titration curve of amino acids.

5+5

b) Write about the Watson and Crick model of DNA. Write a short note on biological importance of peptides.

5+5